

## EXECUTIVE ORDERS

# *Affording Congress an Opportunity to Address Family Separation*

## IMMIGRATION

Issued on: June 20, 2018

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### ALL NEWS

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Immigration and Nationality Act (INA), 8 U.S.C. 1101 *et seq.*, it is hereby ordered as follows:

Section 1. Policy. It is the policy of this Administration to rigorously enforce our immigration laws. Under our laws, the only legal way for an alien to enter this country is at a designated port of entry at an appropriate time. When an alien enters or attempts to enter the country anywhere else, that alien has committed at least the crime of improper entry and is subject to a fine or imprisonment under section 1325(a) of title 8, United States Code. This Administration will initiate proceedings to enforce this and other criminal provisions of the INA until and unless Congress directs otherwise. It is also the policy of this Administration to maintain family unity, including by detaining alien families together where appropriate and consistent with law and available resources. It is unfortunate that Congress's failure to act and court orders have put the Administration in the position of separating alien families to effectively enforce the law.

Sec. 2. Definitions. For purposes of this order, the following definitions apply:

(a) "Alien family" means

(i) any person not a citizen or national of the United States who has not been admitted into, or is not authorized to enter or remain in, the United States, who entered this country with an alien child or alien children at or between designated ports of entry and who was detained; and

(ii) that person's alien child or alien children.

- (b) “Alien child” means any person not a citizen or national of the United States who
- (i) has not been admitted into, or is not authorized to enter or remain in, the United States;
  - (ii) is under the age of 18; and
  - (iii) has a legal parent-child relationship to an alien who entered the United States with the alien child at or between designated ports of entry and who was detained.

Sec. 3. Temporary Detention Policy for Families Entering this Country Illegally. (a) The Secretary of Homeland Security (Secretary), shall, to the extent permitted by law and subject to the availability of appropriations, maintain custody of alien families during the pendency of any criminal improper entry or immigration proceedings involving their members.

(b) The Secretary shall not, however, detain an alien family together when there is a concern that detention of an alien child with the child’s alien parent would pose a risk to the child’s welfare.

(c) The Secretary of Defense shall take all legally available measures to provide to the Secretary, upon request, any existing facilities available for the housing and care of alien families, and shall construct such facilities if necessary and consistent with law. The Secretary, to the extent permitted by law, shall be responsible for reimbursement for the use of these facilities.

(d) Heads of executive departments and agencies shall, to the extent consistent with law, make available to the Secretary, for the housing and care of alien families pending court proceedings for improper entry, any facilities that are appropriate for such purposes. The Secretary, to the extent permitted by law, shall be responsible for reimbursement for the use of these facilities.

(e) The Attorney General shall promptly file a request with the U.S. District Court for the Central District of California to modify the Settlement Agreement in *Flores v. Sessions*, CV 85-4544 (“*Flores* settlement”), in a manner that would permit the Secretary, under present resource constraints, to detain alien families together throughout the pendency of criminal proceedings for improper entry or any removal or other immigration proceedings.

Sec. 4. Prioritization of Immigration Proceedings Involving Alien Families. The Attorney General shall, to the extent practicable, prioritize the adjudication of cases involving detained families.

Sec. 5. General Provisions. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof;  
or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented in a manner consistent with applicable law and subject to the availability of appropriations.

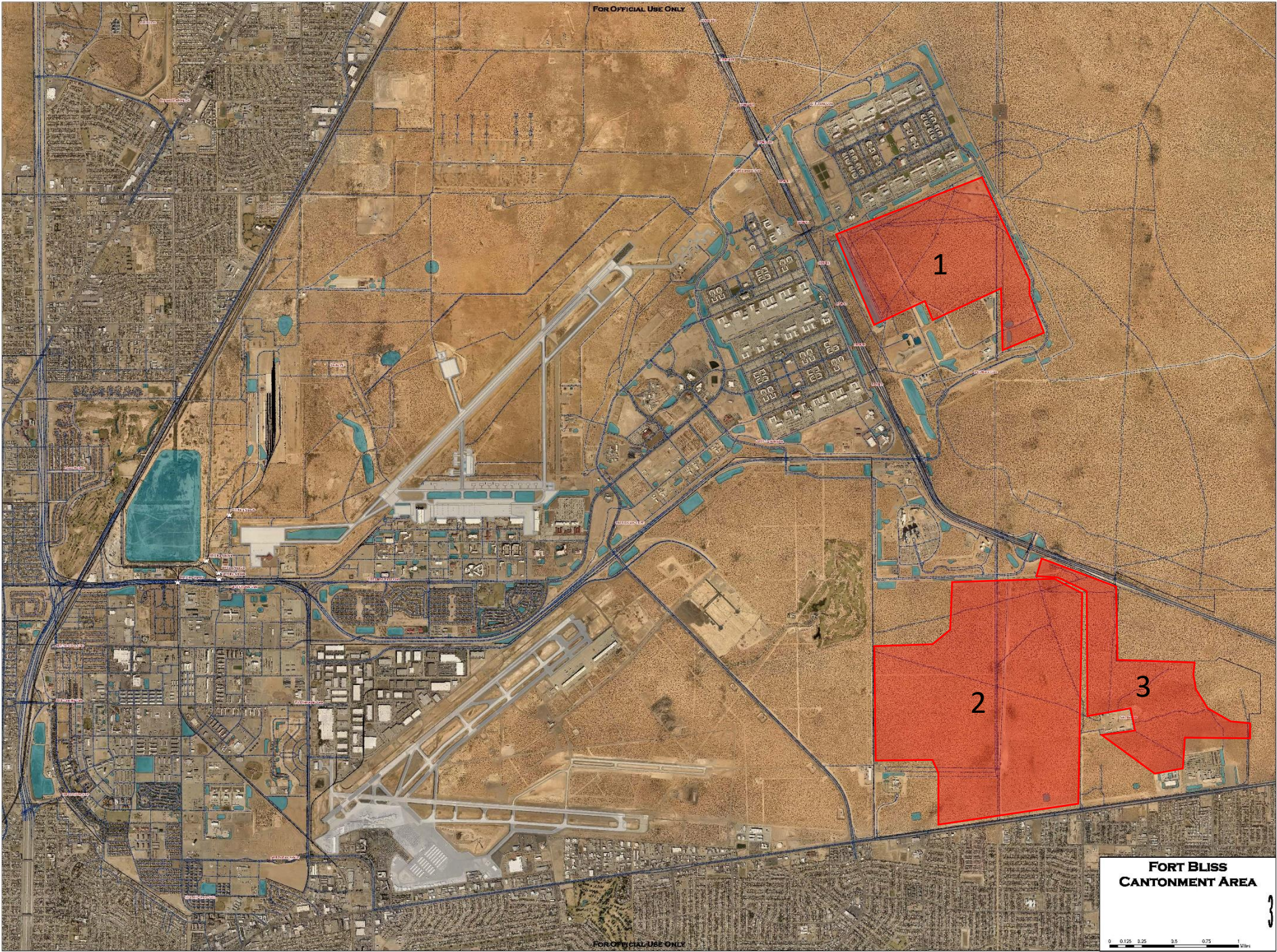
(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

DONALD J. TRUMP

THE WHITE HOUSE,

June 20, 2018.







**DOCUMENT NUMBER: 37-26-0538-85**

**DOCUMENT TITLE: Analyses o f Soils from Three Fire Training Pits,  
USAEHA Project**

**DATE: 17 September 1984**

**PROGRAM: 37**



REPLY TO  
ATTENTION OF

HSHB-ES-H

DEPARTMENT OF THE ARMY Mr. Rosak/kb/AUTOVON  
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY 584-3651  
ABERDEEN PROVING GROUND, MARYLAND 21010

6 DEC 1984

SUBJECT: Analyses of Soils from Three Fire Training Pits, USAEHA  
Project No. 37-26-0538-85

Commander  
USA Training and Doctrine Command  
ATTN: ATMD  
Fort Monroe, VA 23651

1. Reference:

- a. FONECON between Mr. Raphael Nicholas, Fort Bliss, and Mr. David Rosak, this Agency, 17 September 1984, SAB.
- b. Letter, ATZC-DEH-E, Fort Bliss, 22 October 1984, subject: Request for Testing of Soil H/W Characteristic, with 1st Ind, HQ TRADOC, ATEN-FN, 31 October 1984.
- c. FONECON between Mr. Raphael Nicholas, Fort Bliss, and Mr. David Rosak, this Agency, 27 November 1984, subject: Reporting Results from Fire Training Pit Samples.

2. As discussed in reference 1a, polychlorinated biphenyls (PCBs), extraction procedure (EP) toxicity metals, grease and oil, selected hydrocarbons including fuel oil, and analyses for halogenated organic solvents were performed on the soil samples. Flammability and reactivity analyses as listed in reference 1b were not performed. At this time, this Agency does not possess the capability for such testing.

3. In accordance with reference 1c, the analyses reports for PCBs, EP toxicity, grease and oil, selected hydrocarbons, fuel oil, and halogenated organic solvents are attached as inclosures. Residues from fire training site No. 1 are hazardous and include relatively high concentrations of methylene chloride, 1,1,1-trichloroethane, and trichloroethylene.

4. The fuel oil content, as analyzed by gas chromatography (GC), is either diesel fuel or No. 2 fuel oil and was detected in high concentrations in fire training sites No. 1 and No. 2. Because diesel fuel and No. 2 fuel oil have similar GC responses, a definite distinction between the two could not be made. The fuel residual range, as detected by a GC/mass spectrometry purge extraction technique, is a qualitative measurement which does not detect high molecular weight hydrocarbons. As

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SUBJECT: Analyses of Soils from Three Fire Training Pits, USAEHA  
Project No. 37-26-0538-85

expected, these ranges are lower than the GC values, but they are included because they help to verify the GC values. The grease and oil analysis was done by a Soxhlet freon extraction procedure and does not measure all the fractions that may be present in diesel fuel and/or No. 2 fuel oil.

5. No EP toxicity metals, xylene nor PCBs were detected in any of the samples. Low concentration ranges for substituted naphthalenes and trace concentrations for some halogenated purgeable organics were detected but are not significant to be of an environmental danger.

6. Laboratory quality control procedures, in accordance with approved US Environmental Protection Agency guidelines, were conducted with these samples. Upon request, the quality control data can be made available.

7. Point of contact for further questions is Mr. David Rosak or Chief, Hazardous Waste Branch, Waste Disposal Engineering Division, this Agency, AUTOVON 584-3651.

FOR THE COMMANDER:

**ORIGINAL SIGNED**

6 Incl  
as

KARL J. DAUBEL  
Colonel, MS  
Director, Environmental Quality

CF:  
Cdr, TRADOC (ATEN-FN)  
HQDA (DAEN-ZCF-U)  
HQDA (DAEN-ZCE)  
HQDA (DASG-PSP)  
Cdr, HSC (HSCL-P)  
Comdt, AHS (HSHA-IPM)  
Cdr, WBAMC (PVNTMED Svc) (2 cy)  
Cdr, Fort Bliss (ATZC-DEH-E)  
C, USAEHA-Rgn Div West

# INSTALLATION/RETURN ADDRESS

Fort Bliss

PROJECT NUMBER

37-26-0538-84

DATE	SAMPLES	REC
10/1/78	10	10
10/2/78	10	10
10/3/78	10	10
10/4/78	10	10
10/5/78	10	10
10/6/78	10	10
10/7/78	10	10
10/8/78	10	10
10/9/78	10	10
10/10/78	10	10
10/11/78	10	10
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12/29/78	10	10
12/30/78	10	10
12/31/78	10	10

17 Oct 84

PROJECT OFFICER

OFFICER  
Rosa K

TYPE OF SAMPLE

So, /

### PROCEDURES PERFORMED

PROCEDURES PERFORMED PCBs scanned for: Aroclors 1016, 1242, 1248,  
1254, & 1260  
ppm = parts per million

ANALYST(S) *initial*)

John F. Hughes

REVIEWED BY (initial)

RCB

DATE RESULTS REPORTED

22 0:784



RUN DATE: 11/16/84

USAHA

PROJ. OFFICER: ROSAK

INSTALLATION: FT BLISS

EP Toxicity Metal Results  
RADIOLOGICAL AND INORGANIC CHEMISTRY DIVISION  
PROJECT#: 37-0538

METALS ANALYSIS BRANCH

REVIEWED BY: Peter Fianu

TYPE FIELD#

*in ug/L*

She Training Site	SOIL	0538-1	AG	AS	BA	CD	CR	HG	PB	SE
			<500	<500	<10000	<100	<500	<20	<500	<100
"	SOIL	0538-2	AG	AS	BA	CD	CR	HG	PB	SE
			<500	<500	<10000	<100	<500	<20	<500	<100
"	SOIL	0538-3	AG	AS	BA	CD	CR	HG	PB	SE
			<500	<500	<10000	<100	<500	<20	<500	<100
RCRA REGULATORY THRESHOLD in ug/L			5000	5000	100000	1000	5000	200	5000	1000

RUN DATE: 20NOV84

# Grease & Oil Results

RADIOLOGICAL AND INORGANIC CHEMISTRY DIVISION

IRON-METALS ANALYSIS BRANCH

Proj. Officer: Fosak

Division: WBED

Installation: Ft. Bliss

Timekeeping #: 37-23-0538

Proj. Chemist: Ryan

Sample Description: Soils

Remarks: Method: Soxhlet Trecen Extraction

Date Received: 11OCT84

Date Reviewed: 20NOV84

Reviewed by: mal

G40

<u>SPL ID.</u>	<u>mg/Kg</u>
<u>FIRE TRAINING SITE</u>	
1	81.
2	50
3	52.

3

*Ryan E. Sleep*  
R. E. SLEEP, Ph.D.  
Chief, Iron-Metal Analysis  
Branch, Radiological & Inorganic  
Chemistry Division



## Selected Hydrocarbon Results

GC/MS Analysis / Purge Extraction Technique

## FOOT BUSS SOILS

ESTIMATED CONCENTRATION RANGE (mg/g)

Sample Number	1	2	3
Compound			
Xylene	NF	NF	NF
Fuel residual	20 → 40	15 → 35	NF
petroleum ether residual	NF	NF	NF
Substituted naphthalenes	10 → 20	15 → 25	TR

COMMENTS:

NF - NOT FOUND

TR - TRACE DETECTED BUT NOT QUANTITATIVE

ANALYST

7, DATE

REVIEWED

14 Nov 1984

023596

4 IN 12/10/2018

023597



US ARMY ENVIRONMENTAL HYGIENE AGENCY  
ORGANIC ENVIRONMENTAL CHEMISTRY DIVISION  
MASS SPECTROMETRY LABORATORY

PURGEABLE ORGANICS ANALYSIS REPORT

SAMPLE FT. BLISS SOILS

SAMPLING: DATE ANALYSIS: 2-5 NOV, 84

MS FILE VARIOUS

COMPOUND	FIRE TRAINING SITE	1	2	3
BENZENE				
BROMOMETHANE	TR*			
BROMODICHLOROMETHANE	<1	<1	<1	
BROMOFORM	<1	<1	<1	
CARBON TETRACHLORIDE	<1	<1	<1	
CHLOROBENZENE	<1	<1	<1	
CHLOROETHANE	TR			
2-CHLOROETHYL VINYL ETHER	<1	<1	<1	
CHLOROFORM	<1	<1	<1	
CHLOROMETHANE	<1	<1	<1	
DIBROMOCHLOROMETHANE	<1	<1	<1	
1,1-DICHLOROETHANE	<1	<1	<1	
1,2-DICHLOROETHANE	<1	<1	<1	
1,1-DICHLOROETHENE	<1	<1	<1	
1,2-DICHLOROETHENE (TRANS)	9	<1	<1	
1,2-DICHLOROPROPANE	4	<1	<1	
1,3-DICHLOROPROPENE (CIS)	<1	<1	<1	
1,3-DICHLOROPROPENE (TRANS)	<1	<1	<1	
ETHYL BENZENE	<1	<1	<1	
METHYLENE CHLORIDE	TR			
1,1,2,2-TETRACHLOROETHANE	25	<1	<1	
TETRACHLOROETHYLENE	<1	<1	TR	
1,1,1-TRICHLOROETHANE		<1	<1	
1,1,2-TRICHLOROETHANE	69	<1	<1	
TRICHLOROETHYLENE	<1	<1	<1	
TRICHLOROFLUOROMETHANE	153	<1	<1	
TOLUENE	<1	<1	<1	
VINYL CHLORIDE	***			
OTHER COMPOUNDS:	<1	<1	<1	
	Yes	Yes	Yes	

\*\* - Toluene present in blank for procedure employed.

\* TR - TRACE AMOUNT BUT NOT QUANTITATIVE

Analyst AKL + RFD

Reviewed RIV

1. Keywords

55-GALLON DRUM  
DISPOSAL  
FUEL  
HAZARDOUS WASTE  
OCC HLTH REG  
OIL  
PROTECTIVE PROCEDURE  
RECYCLING OF WASTE  
TRICHLOROETHANE  
TRICHLOROETHYLENE

2. Start Date: FY 85 Quarter 4  
End Date: FY 86 Quarter 4

3. HQ Division: 26 - WASTE DISPOSAL ENGINEERING DIV

4. Phase:

5. Program NO: 37

6. Survey Type: GY - HAZARDOUS WASTE MANAGEMENT STUDY

7. INSTALLATION OR SOURCE OF INFORMATION (CITY & STATE OR  
COUNTY ARE ESSENTIAL)

TC - USA TRAINING & DOCTRINE COMMAND

8. Authors:

9. ARLOC/Activity: 48083 000 - FORT BLISS  
Location: FORT BLISS  
State: TX

10. Project Control Number: 26-0588-86

11. Title: IDENTIFY STORED WASTE MATERIAL

12. DSA: 66

MBLTCB  
PS  
Initial File



DEPARTMENT OF THE ARMY  
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY  
ABERDEEN PROVING GROUND, MARYLAND 21010-5422

REPLY TO  
ATTENTION OF

HSBH-ME-SH

8 September 1986

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Commander  
US Army Training and  
Doctrine Command  
ATTN: ATMD  
Fort Monroe, VA 23651-5451

1. AUTHORITY. 1st End, HQ TRADOC, ATEN-FN, 31 October 1984, to letter, ATZC-DEH-E, Fort Bliss, 22 October 1984, subject: Request for Testing of Soil HW Characteristics.
2. REFERENCES. See Enclosure 1 for a list of references used in this report.
3. PURPOSE. This study was conducted to identify the contents of 1,551 55-gallon drums of waste material stored throughout the fire training area and to recommend disposal options for the material.
4. GENERAL.
  - a. Background. The fire training area at Fort Bliss consists of approximately 8-10 burn sites. Each of these sites has a 55-gallon drum of waste material stored in the vicinity for use in training exercises. In addition, there is a large centralized storage area for drums at the site. Currently, there is a total of 1,551 full drums (i.e., containing more than 1 inch of material) and 160 empty drums at the training area. Many of the drums are open and, therefore, may contain water and/or have allowed for evaporation of the more volatile compounds. The material contained within the drums was generated on Fort Bliss and consists of two basic categories of chemicals:

Distribution limited the US Government Agencies only;  
protection of privileged information evaluating another  
command; Aug 86. Requests for this document must be referred  
to Commander, US Army Training and Doctrine Command,  
ATTN: ATMD, Fort Monroe, VA 23651-5451.

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SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas, 15-18 September 1985

(1) Fuels, consisting of single components or mixtures of kerosene, diesel, gasoline, motor gasoline, aviation gasoline (AVGAS), JP-4 (jet fuel), etc.

(2) Waste/Used Oil alone or in combination with maintenance shop/motor pool waste (i.e., hydraulic fluid, degreasing solvent, etc.). Additionally, there is the possibility that other solvents generated on the installation may be included in this category. They are:

- (a) acetone.
- (b) alcohols (ethyl, isobutyl, isopropyl, methyl).
- (c) ethyl acetate.
- (d) degreasing solvent (PD-680/stoddard solvent).
- (e) methyl ethyl ketone.
- (f) methyl isobutyl ketone.
- (g) paint thinner/remover.
- (h) toluene.
- (i) xylene.
- (j) 1,1,1-trichloroethane.
- (k) trichloroethylene.
- (l) methylene chloride.

Many of the drums are labeled with a large letter as to which category they fall into: F for fuels and O for used oils.

b. Sampling and Recordkeeping. Once the drums were arranged in working order, a 1-quart sample was obtained from each drum selected for sampling. Since all drums at the fire training area originate at Fort Bliss and are suspected to contain similar materials (either fuels or oil/solvent waste), 10 percent of the drums were to be randomly selected for sampling (approximately 155) to determine disposal options. However, since the majority of drums that were supposed to be full were actually empty (contained less than 1 inch of material) sampling was not random but from drums that contained enough liquid to obtain a sample. Samples were

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SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas, 15-18 September 1985

obtained using a 3-foot hollow glass tube (13 mm inside diameter) which was repeatedly dipped into the drum until the 1-quart sample was obtained. The samples were placed in clear 1-quart, wide mouth glass bottles with Teflon®-lined lids. The drums were then numbered using a permanent marker, and the number was recorded in a logbook along with any pertinent label information or physical/chemical observations made about the sample (e.g., color, odor, viscosity, pH, number of phases, suspected identity and volume). One hundred and fifty-six samples were collected. This comprised the majority of drums that contained enough liquid to be sampled.

c. Sample Compositing and Field Testing. Following collection of the 156 drum samples, materials that appeared to be very similar were composited to make up the laboratory samples. Compositing was on the basis of information in the sample log and field tests performed onsite (i.e., pH, Beilstein for chlorine, specific gravity, water solubility/misability). A composite sample was made up of material from no more than 10 drum samples. Records of which drums made up each composite laboratory samples were maintained.

d. Analytical Testing. Once the drum samples were composited into laboratory samples, an analytical scheme (i.e., recommended series of laboratory tests) for each sample was developed from the available information about each sample. For example, the samples that are in the fuels category had the following laboratory tests conducted:

- (1) Flash point determination.
- (2) Composition identification (including halogenerated solvents).

e. The waste oil/solvent category was analyzed for the following parameters:

- (1) Flash point determination.
- (2) Polychlorinated biphenyl (PCB) content.
- (3) Heavy metals (lead, cadmium, arsenic, chromium).
- (4) Composition identification (i.e., chlorinated solvents, nonchlorinated solvents, petroleum hydrocarbons).

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• Teflon is a registered trademark of E. I. DuPont de Nemours and Co., Inc., Wilmington, Delaware. Use of trademarked names does not imply endorsement by the US Army but is used only to assist in identification of a specific product.



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SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Analytical methodology was per US Environmental Protection Agency (EPA) Manual SW-846, Test Methods for Evaluating Solid Waste - Physical/Chemical Methods or a similar validated methodology.

f. Drum Disposal.

(1) After completion of the identification phase of this project, the most appropriate disposal recommendations will be made for the various categories of waste identified. In some instances, a worst-case disposal option may have to be used for commingled waste material. The identification of certain contaminants, such as PCBs in the composite samples may require a resampling and analysis of drums on an individual basis depending on the levels found.

(2) Empty waste drums that are generated during the waste removal operation or were already onsite (160) should be disposed of in a permitted sanitary landfill following crushing. This procedure will only be used if, in the testing and identification phase, no acutely hazardous wastes [as defined by the Resource Conservation and Recovery Act (RCRA)] are found.

5. FINDINGS AND DISCUSSION.

a. Laboratory Samples. The 156 drum samples resulted in 38 laboratory samples. Seventeen of these samples were from single drums and the other 21 were from compositing drum samples (see Enclosure 2).

b. Corrosivity. All samples that appeared to have an aqueous phase were tested in the field to determine their pH using Indicator Sticks (pH 0-14) from E. Merck, Darmstadt, Germany (see Enclosure 3). Sixty-one samples (aqueous phase) were tested for corrosivity and none were found to be hazardous (i.e., have a pH less than or equal to 2 or greater than or equal to 12.5). Values for the samples ranged from a low of 4 to a high of 8. If any of the samples tested would have approached a regulated pH value, then the samples would have been analyzed using a more accurate instrumental method.

c. Chlorinated Solvents. To screen sample groups in the field for the presence of chlorinated contaminants a representative sample from each group of similar appearing materials was subjected to a Beilstein test (see Enclosure 4). This consisted of dipping a copper wire in the sample and then burning it in a flame and looking for the characteristic green color produced by chlorinated materials. Twenty-three samples were tested using this method, and all were negative. Composite samples brought back to the laboratory for analysis were also screened for chlorinated materials using gas chromatography with electron capture detector.

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas, 15-18 September 1985

d. Laboratory Analysis. Results of analysis on the 38 composite and single samples brought back to this Agency are presented in Enclosure 5. Analysis of the samples confirms the assumption that the material in the drum consists primarily of fuels and oils contaminated with water. Eleven of the samples (oil and hydraulic fluid) were selected for PCB screening as a check, and all were negative. Many of the oils (17) were also analyzed for total lead, cadmium, chromium, and arsenic. The samples with the highest concentrations were then analyzed for extraction procedure (EP) metals, and none exceeded the RCRA regulated levels. Five of the samples, representing 19 drums, (12.2 percent) contained small amounts of chlorinated solvents (i.e., trichloroethane and tetrachloroethylene) with the highest total being 2,700 ppm (0.27 percent). Fourteen of the samples fall into the ignitable category under RCRA with a flash point below 140 °F.

e. Hazardous Classification. The drummed material at Fort Bliss falls into two hazard categories; ignitability (flash point below 140 °F) and toxicity (contains trichloroethane and/or tetrachloroethylene both listed wastes). Additionally, many of the oils exceed the allowable level for metals (i.e., cadmium and/or lead).

f. Disposal. All drums (oils or fuels) containing trichloroethane and/or tetrachloroethylene must be segregated and then managed/disposed of as hazardous waste. The drums containing fuels and no other hazardous contaminants which are regulated due to their low flash point, can be combined and then either recycled or disposed of as hazardous waste. The oils also can be combined and then should be retested. If the blended oil does not exceed any of the following specifications, it is not regulated by RCRA when burned for energy recovery and can be recycled or burned as any waste oil:

- (1) Arsenic - 5 ppm maximum.
- (2) Cadmium - 2 ppm maximum.
- (3) Chromium - 10 ppm maximum.
- (4) Lead - 100 ppm maximum.
- (5) Flash point - 100 °F minimum.
- (6) Total Halogens - 4,000 ppm maximum.

If any of the criteria are exceeded, the oil must then be managed according to Subpart E of 40 CFR 266 if burned for energy recovery. Recycling is a viable alternative regardless of whether the oil meets the above specifications.

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Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

6. CONCLUSION. Analysis of samples taken from drums stored at the fire training area of Fort Bliss shows the material to be primarily fuel, used oil, or a combination of the two contaminated with water.

7. RECOMMENDATIONS. To ensure regulatory compliance, the following recommendations are made:

a. Segregate all drums containing trichloroethane and/or trichloroethylene. Manage and dispose of this material in accordance with appropriate RCRA regulations (40 CFR 262.12 - 262.43).

b. Combine contents of all drums containing fuels (i.e., diesel, gasoline, JP-4, AVGAS, etc.) and recycle or dispose of as hazardous waste (40 CFR 261.6, 40 CFR 262.12 - 262.43).

c. Combine contents of oil drums and then retest for parameters listed in section 5f of this report if the oil is to be burned for energy recovery (40 CFR 266.40). If results exceed any regulated parameter manage the oil according to Subpart E of 40 CFR 266. The oil may also be recycled (AR 420-47, paragraph 2-12c).

FOR THE COMMANDER:



KARL J. DAUBEL  
Colonel, MS  
Director, Environmental Quality

5 Encls

CF:  
HQDA(DAEN-ZCF-U/DAEN-ZCE)  
HQDA(DASG-PSP)  
Cdr, TRADOC (ATEN) (5 cy)  
Comdt, AHS (HSHA-IPM)  
Cdr, WBAMC (PVNTMED Svc) (2 cy)  
Cdr, USAEHA Fld Spt Actv, FAMC

HSHB-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

#### REFERENCES

1. AR 420-47, 1 December 1984, Solid and Hazardous Waste Management.
2. Title 40, CFR, 1985 rev, Part 261, Identification and Listing of Hazardous Waste.
3. Title 40, CFR, 1985 rev, Part 262, Standards Applicable to Generators of Hazardous Waste.
4. Title 40, CFR, 1985 rev, Part 266, Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities.
5. EPA Manual SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 2d Edition, 1982.

HSHB-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

LABORATORY SAMPLES AND DRUM SAMPLES THAT COMPRISE THEM

Laboratory Sample Number	Suspected Identity	Drum Numbers that Comprise Laboratory Sample
1	70% fuel oil/30% water	9
2	80% fuel oil/20% water	27,31,35,71,152
3	Fuel	22,27,29,31,33,35,62, 71,111,120,152
4	Fuel (dark color)	1,7,11,49,52,60,61,73
5	Fuel	55,56
6	Light solvent	3,121,125,128
7	Light solvent	10,15,25,82,110,122
8	Solvent (dark color)	28,32,58,106,115
9	Black solvent	18,21,39,47,50,53,54, 59,67,149
10	80% black solvent/20% water	19,37,38,85,131,138,142
11	Fuel oil	70
12	Fuel	132
13	60% hydraulic fluid/ 40% water	78
14	Antifreeze	68
15	Unknown	5
16	Unknown	64
17	Unknown	40
18	Fuel oil	148
19	Unknown	51



HSHB-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Laboratory Sample Number	Suspected Identity	Drum Numbers that Comprise Laboratory Sample
20	Unknown	42
21	Unknown	66
22	Unknown	41
23	Fuel oil	30
24	Fuel	114
25	Motor oil	77
26	Viscous oil	141
27	5% oil/95% water	12, 17, 80, 81, 83, 86, 126, 134, 136, 143
28	5% oil/95% water	74, 76, 90, 93, 94, 95, 96, 103, 119, 140
29	5% oil/95% water	2, 87, 88, 89, 91, 92, 100, 102, 135, 146, 150, 154
30	10% oil/90% water	75, 79, 108, 112, 116, 155, 156
31	Oil	45, 151, 153
32	Oil	6, 34, 36, 57
33	70% oil/30% water	13, 14, 48, 65, 84, 98, 104
34	Light oil	8, 16, 43, 137, 144
35	10% oil/90% water	4, 97, 118, 123, 124, 127, 129, 145, 147
36	10% oil/90% water	63, 72, 99, 101, 105, 107, 109, 113, 117
37	Oil	20, 44, 130, 133
38	70% oil (black)/30% water	22, 23, 24, 46, 69, 139

HSHB-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Corrosivity Field Testing

Drum Sample Number	Sample Description	pH (range)
2	100% water	6-8
4	4% oil/90% water	6-8
9	75% solvent/25% water	6-8
16	99% oil/1% water	6-8
27	80% fuel/20% water	5-6
30	70% oil (milky)/30% water	6-8
31	80% fuel/20% water	5-6
34	90% oil/10% water	6-8
35	80% fuel/20% water	5-6
36	80% oil/20% water	6-8
43	98% oil/2% water	6-8
63	1% oil/99% water	6-8
65	75% oil/25% water	6-8
72	2% oil/98% water	6-8
74	5% oil/95% water	6-7
75	10% oil/90% water	6-7
76	5% oil/95% water	6-7
79	10% oil/90% water	6-7
80	5% oil/95% water	6-7
81	5% oil/95% water	6-7
83	5% oil/95% water	6-7
87	5% oil/95% water	6-7
88	5% oil/95% water	6-7

HSHB-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
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Drum Sample Number	Sample Description	pH (range)
89	5% oil/95% water	6-7
90	5% oil/95% water	6-7
91	5% oil/95% water	6-7
92	5% oil/95% water	6-7
93	5% oil/95% water	6-7
94	5% oil/95% water	6-7
95	5% oil/95% water	6-7
96	5% oil/95% water	6-7
97	1% oil/99% water	6-8
98	25% oil/75% water	6-8
99	1% oil/99% water	6-8
100	5% oil/95% water	6-7
101	2% oil/98% water	6-8
104	25% oil/75% water	6-8
105	2% oil/98% water	6-8
107	2% oil/98% water	6-8
10	92% oil/98% water	6-8
112	10% oil/90% water	6-7
113	2% oil/98% water	6-8
117	2% oil/98% water	6-8
118	2% oil/98% water	6-8
119	5% oil/95% water	5-6

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SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Drum Sample Number	Sample Description	pH (range)
123	1% oil/99% water	6-8
124	1% oil/99% water	6-8
127	1% oil/99% water	6-8
129	0.5% oil/99.5% water	6-8
134	5% oil/95% water	6-7
135	5% oil/95% water	6-7
136	5% oil/95% water	6-7
140	5% oil/95% water	4-5
143	5% oil/95% water	6-7
145	0.5% oil/99.5% water	6-8
146	5% oil/95% water	4-5
147	1% oil/99% water	6-8
150	5% oil/95% water	4-5
154	100% water	6-8
155	10% oil/90% water	6-7
156	10% oil/90% water	6-7

HSHB-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Field Testing (Beilstein) for Chlorinated Contaminants

Drum Sample Number	Suspected Description	Results (+ or -)
4	Oil slick on water	-
6	80% oil/20% water	-
7	Fuel (dark color)	-
11	Fuel (dark color)	-
14	Oil	-
24	Oil (black)	-
45	80% oil/20% antifreeze	-
56	90% fuel/10% water	-
59	Black solvent on water	-
62	Fuel	-
67	Black solvent on water	-
85	80% black solvent/20% water	-
106	Black solvent	-
110	Light solvent	-
111	Fuel	-
123	Oil slick on water	-
128	Light solvent	-
130	90% oil/10% water	-
131	80% black solvent/20% water	-
137	Light oil	-
149	Black solvent on water	-
151	80% oil/20% anti freeze	-
156	10% oil/90% water	-

Encl 4



HSBQ-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Results of Laboratory Analyses on Drum Composite Samples\*

Laboratory Sample Number	Number of Phases	Analyses Performed	Upper Phase	Results†	Lower Phase
1	2	Flash Point	74.5 °F		74.5 °F ‡
		Bulk Analysis §	Light petroleum fraction (i.e., motor or heating fuel)		water
2	2	Flash Point	72 °F		72 °F
		Bulk Analysis	Same as sample 1		
3	1	Flash Point	71.5 °F		
		Bulk Analysis	Light petroleum fraction (i.e., motor or heating fuel)		
4	1	Flash Point	>100 °F - <140 °F		
		Bulk Analysis	Light petroleum fraction (i.e., motor or heating fuel) mixed with a heavy petroleum fraction (i.e., motor oil)		
		Total Metals//	Nondetectable		
5	1	Flash Point	>140 °F		
		Bulk Analysis	Heavy petroleum fraction (i.e., motor oil) - 60% phenyl isopropyl phosphate; triphenyl phosphate - 40%		
6	1	Flash Point	73 °F		
		Bulk Analysis	Sample as sample 3		
7	1	Flash Point	75 °F		
		Bulk Analysis	Sample as sample 3		
8	1	Flash Point	75 °F		
		Bulk Analysis	Sample as sample 4		
		Total Metals	lead - 7.4 mg/kg		
9	1	Flash Point	>140 °F		
		Bulk Analysis	Blend of synthetic (ester based) lubricants and petroleum based lubricants		
		Total Metals	lead - 57 mg/kg cadmium - 2.6 mg/kg		

See footnotes on page 6.

Encl 5

HSHP-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas.  
15-18 September 1985

Laboratory Sample Number	Number of Phases	Analyses Performed	Results†	
			Upper Phase	Lower Phase
10	2	Flash Point	>140 °F	
		Bulk Analysis	Sample as sample 9 plus 200 ppm trichloroethane	water
		Total Metals	lead - 17.2 mg/kg cadmium - 0.94 mg/kg	
11	1	Flash Point	>100 °F - <140 °F	
		Bulk Analysis	Same as sample 4	
		Total Metals	lead - 22.4 mg/kg cadmium - 0.7 mg/kg	
12	1	Flash Point	>140 °F	
		Bulk Analysis	Same as sample 4, but more oil than fuel	
		Total Metals	cadmium - 1.1 mg/kg	
13	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Synthetic hydraulic fluid	water
		Total Metals	lead - 2.8 mg/kg	
		PCB	Nondetectable	
14	1	Flash Point	>140 °F	
		Bulk Analysis	Ethylene glycol	
15	2	Flash Point	77 °F	77 °F
		Bulk Analysis	Light petroleum fraction (i.e., heating or motor fuel) mixed with synthetic motor oil	water
		Total Metals	lead - 18.0 mg/kg	
16	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Heavy petroleum fraction (lubricating oil)	water
17	1	Flash Point	>140 °F	
		Bulk Analysis	Blend of synthetic and petroleum based lubricants	
		Total Metals	lead - 5.2 mg/kg	

See footnotes on page 6.

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SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Laboratory Sample Number	Number of Phases	Analyses Performed	Results†	
			Upper Phase	Lower Phase
18	1	Flash Point	>140 °F	
		Bulk Analysis	Heavy petroleum fraction (i.e., motor oil)	
		Total Metals	lead - 282 mg/kg cadmium - 2.0 mg/kg chromium - 1.9 mg/kg	
		EP Toxicity Metals	lead - 4.0 mg/kg cadmium - 0.12 mg/kg chromium - <0.5 mg/kg	
		PCB	Nondetectable	
19	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Same as sample 4	water
		Total Metals	Nondetectable	
20	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Same as sample 4 plus 1,100 ppm - trichloroethane 1,600 ppm - tetrachloroethylene	water
21	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of water, light petro- leum fraction (i.e., motor or heating fuel), and methyl silicone oil	water
22	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Heavy petroleum fraction (i.e., motor oil) and a surfactant	water
23	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of water, heavy petroleum fraction (i.e., lubricating oil), light petroleum fraction (i.e., motor or heating fuel), plus 1,500 ppm - trichloroethane	water
24	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of light petroleum fraction (i.e., motor or heating fuel) and water	water

See footnotes on page 6.

HSHB-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Laboratory Sample Number	Number of Phases	Analyses Performed	Results†	
			Upper Phase	Lower Phase
25	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of heavy petroleum fraction (i.e., lubricating oil) and water	water
		Total Metals	lead - 2.9 mg/kg	
26	1	Flash Point	>140 °F	
		Bulk Analysis	Polyacrylamide (synthetic plastic) and water	
27	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of water and heavy petroleum fraction (i.e., motor oil)	water
		PCB	Nondetectable	
28	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of heavy petroleum fraction (i.e., lubricating oil) and water	water
		Total Metals	lead - 3.5 mg/kg	
		PCB	Nondetectable	
29	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of heavy petroleum fraction (i.e., lubricating oil) and water	water
		PCB	Nondetectable	
30	2	Flash Point	>100 °F - <140 °F	>100 °F - <140 °F
		Bulk Analysis	Emulsion of heavy petroleum fraction (i.e., motor oil) and water	water
31	1	Flash Point	>140 °F	
		Bulk Analysis	Emulsion of synthetic (ester based) oil, petroleum based oil, methyl silicone oil and water	
		Total Metals	lead - 30.1 mg/kg chromium - 1.3 mg/kg cadmium - 7.4 mg/kg	
		EP Metals	Nondetectable	

See footnotes on page 6.

HSHP-ME-SH

SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Laboratory Sample Number	Number of Phases	Analyses Performed	Results†	
			Upper Phase	Lower Phase
32	1	Flash Point	75 °F	
		Bulk Analysis	Emulsion of light petroleum fraction (i.e., motor or heating fuel), a heavy petroleum fraction (i.e., lubricating oil), and water	
33	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Emulsion of heavy petroleum fraction (i.e., lubricating oil) and water	water
		Total Metals	lead - 53.4 mg/kg chromium - 1.0 mg/kg cadmium - 2.1 mg/kg	
34	1	Flash Point	>100 °F - >140 °F	
		Bulk Analysis	Light petroleum fraction (i.e., motor or heating fuel)	
35	2	Flash Point	>100 °F - <140 °F	>100 °F - <140 °F
		Bulk Analysis	Heavy petroleum fraction (i.e., lubricating oil)	water
		PCB	Nondetectable	
36	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Heavy petroleum fraction (i.e., lubricating oil)	water
		PCB	Nondetectable	
37	1	Flash Point	>140 °F	
		Bulk Analysis	Heavy petroleum fraction (i.e., lubricating oil) plus 200 ppm - trichloroethane	
		Total Metals	lead - 31.5 mg/kg chromium - 1.4 mg/kg cadmium - 6.9 mg/kg	
		EP Metals	Nondetectable	
		PCB	Nondetectable	

See footnotes on page 6.



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SUBJECT: Hazardous Waste Study No. 37-26-0588-86, Identification of  
Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas,  
15-18 September 1985

Laboratory Sample Number	Number of Phases	Analyses Performed	Results†	
			Upper Phase	Lower Phase
38	2	Flash Point	>140 °F	>140 °F
		Bulk Analysis	Heavy petroleum fraction (i.e., lubricating oil) plus 440 ppm - trichloroethane	water
		Total Metals	lead - 75.5 mg/kg chromium - 0.77 mg/kg cadmium - 0.92 mg/kg	
		EP Metals	Nondetectable	
		PCB	Nondetectable	

\* See enclosure 2 for drums that comprise laboratory samples.

† One set of data indicates a single phase sample.

‡ Low flash point for water phase is indicative of a small amount of upper phase fuel being present in the water.

§ Includes analysis for halogenated solvents.

// Analysis for arsenic, cadmium, lead, and chromium.

**DOCUMENT NUMBER: 33-26-1647-88**

**DOCUMENT TITLE: INTERIM FINAL REPORT EVALUATION OF SOLID  
WASTE MANGEMENT UNITS FORT BLISS, TEXAS HAZARDOUS WASTE  
CONSULTATION**

**DATE: 3-7 AUGUST 1987**

**PROGRAM: 33**



**A  
E  
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A**

# **UNITED STATES ARMY ENVIRONMENTAL HYGIENE AGENCY**

**ABERDEEN PROVING GROUND, MD 21010-5422**

**INTERIM FINAL REPORT  
HAZARDOUS WASTE CONSULTATION NO. 37-26-1647-88  
EVALUATION OF SOLID WASTE MANAGEMENT UNITS  
FORT BLISS, TEXAS  
3-7 AUGUST 1987**

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DEPARTMENT OF THE ARMY  
U.S. ARMY ENVIRONMENTAL HYGIENE AGENCY  
ABERDEEN PROVING GROUND, MARYLAND 21010-8422



REPLY TO  
ATTENTION OF

MSHB-ME-SE

3 June 1988

MEMORANDUM FOR: Commander, U.S. Army Training and Doctrine Command, ATTN: ATMD, Fort Monroe, VA 23651-5451

SUBJECT: Interim Final Report, Hazardous Waste Consultation No. 37-26-1647-88, Evaluation of Solid Waste Management Units, Fort Bliss, Texas, 3-7 August 1987

EXECUTIVE SUMMARY

The purpose, conclusions, and a summary of the recommendations of the enclosed report follow:

a. Purpose. The U.S. Army Training and Doctrine Command (TRADOC) requested the assistance of the U.S. Army Environmental Hygiene Agency (USAEHA) to evaluate Solid Waste Management Units (SWMU's) present at Fort Bliss. The information generated from this study will aid the installation in identifying those units which require environmental sampling and/or remedial action for compliance with Title 40 Code of Federal Regulations, Section 264.101, Corrective Action for Solid Waste Management Units.

b. Conclusions. Several SWMU's at Fort Bliss exhibit continuing releases of hazardous constituents; however, most of these units are currently undergoing corrective action in coordination with the installation, the U.S. Environmental Protection Agency (EPA), the Texas Water Commission and this Agency. Our field investigations located a number of abandoned surface dumping sites including fuels, waste oils and debris. Most of these sites are in or near a discernible SWMU as identified under Resource Conservation and Recovery Act Section 3004(u). The majority of SWMU's at Fort Bliss require no corrective action and exhibit no releases of hazardous or potentially hazardous constituents. These units are closed landfills or facilities such as oxidation lagoons or other units which conform to operating regulations and show no signs of releases. Ground-water contamination potential is mitigated by climate and geology such that leachate is unlikely to occur, and hazardous constituents penetrating the surface are inhibited by a high evaporation rate, low precipitation, soils of low permeability and extensive depths to ground water.

c. Recommendations. To ensure regulatory compliance, we recommend the following: Forward this report for review by State and EPA region regulatory authorities. Arrange a visual site inspection at Fort Bliss with the State, EPA and this Agency. Perform the environmental sampling and remedial action as required for SWMU's (FTBL-002, 015, 016, 017, 018, 019, 024, 025, 027, 028).

FOR THE COMMANDER:

Enc1

*For Roy D. Miller, LTC, MS*  
PAUL R. THIES  
LTC, MS  
Chief, Waste Disposal  
Engineering Division

CF:  
DA, USAEHSC, ATTN: CEHSC-E/CEHSC-F (w/enc1)  
HQDA(DASG-PSP) (wo/enc1)  
Cdr, TRADOC, ATTN: ATEN-FN (w/enc1)  
Cdr, WBAHC, ATTN: PVNTMED Svc (2 cy) (w/enc1)  
Cdr, USAEHA Fld Spt Actv, FPMC (w/enc1)

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REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY  
ABERDEEN PROVING GROUND, MARYLAND 21010-5422



HSHB-ME-SE

INTERIM FINAL REPORT  
HAZARDOUS WASTE CONSULTATION NO. 37-26-1647-88  
EVALUATION OF SOLID WASTE MANAGEMENT UNITS  
FORT BLISS, TEXAS  
3-7 AUGUST 1987

1. **AUTHORITY.** Letter, HQ TRADOC, ATMD, 25 June 1986, subject: FY 87 Field Service Requirements.

2. **PURPOSE.** To evaluate SWMU's at Fort Bliss, and to identify those units requiring environmental sampling or remedial action.

3. **GENERAL.**

a. Personnel Contacted. Appendix A provides a list of personnel contacted during this study.

b. USAEHA Study Personnel. Mr. Wayne L. Hardcastle, Environmental Scientist and Jack M. Heller, Ph.D., Environmental Scientist, Waste Disposal Engineering Division, performed this study.

c. Abbreviations and Definitions. Appendix B provides a list of abbreviations and definitions of terms used in this report.

d. Background.

(1) Hazardous waste treatment, storage, or disposal facilities seeking a permit after 8 November 1984, under Section 3004(u) of the RCRA (as amended by the HSWA of 1984), are required to address corrective action for all releases of HW or HW constituents from any SWMU. This includes inactive units at the facility, regardless of the time at which waste entered the unit. The codification for this statutory requirement is 40 CFR 264.101(b). To implement the provisions of section 3004(u), the owner/operator of any facility seeking a permit to be issued after 8 November 1984 must submit with the permit application sufficient information to enable EPA to assess the applicability of this section to the owner/operator's facility. The EPA is not authorized to issue a permit without a determination that the facility is in compliance with section 3004(u).

(2) Fort Bliss is presently in the process of preparing a Part B permit application for a HW container storage facility. To comply with the requirements discussed in the preceding paragraph, the information on SWMU's compiled in this report will be submitted along with the Part B permit application to the Texas State Department of Health and EPA Region VI to facilitate the issuance of the Part B permit.

e. Consultation Methodology. Several enabling documents provide the foundation for the information gathered and the subsequent development of this consultation. These documents included the RCRA Facility Assessment Guide, and the EPA National RCRA Corrective Strategy document. By the use of these documents and on site visits, those activities classified as SWMU's were identified and evaluated for potential corrective action. Environmental recommendations in terms of the RFA or an RFI were determined based on information gathered onsite and through document review.

f. Site Geographical Setting.

(1) Fort Bliss occupies a portion of the Basin and Range physiographic province in the far western corner of the State of Texas and in south-central New Mexico. The installation comprises an area of 1.2 million acres of which 89 percent is in New Mexico. The remaining 11 percent and main cantonment area are in northern El Paso County, Texas. See Figure 1.

(2) The reservation encompasses four major topographic zones; however, the majority of acreage occupies the Tularosa Basin, a broad, arid, semidesert valley situated between a periphery of mountain ranges. Surrounding the Tularosa Basin and extending north and east of El Paso are sections of the Franklin Mountains to the west, Organ Mountains in the northwest, Hueco Mountains in the central area and the Sacramento Mountains in the Northeast. Maximum elevations are 1,727 meters above MSL in the Hueco Mountains and up to 2,606 meters above MSL in the Organ Mountains. Valley elevations range from approximately 1,273 meters in the east to 1,197 meters in the west.

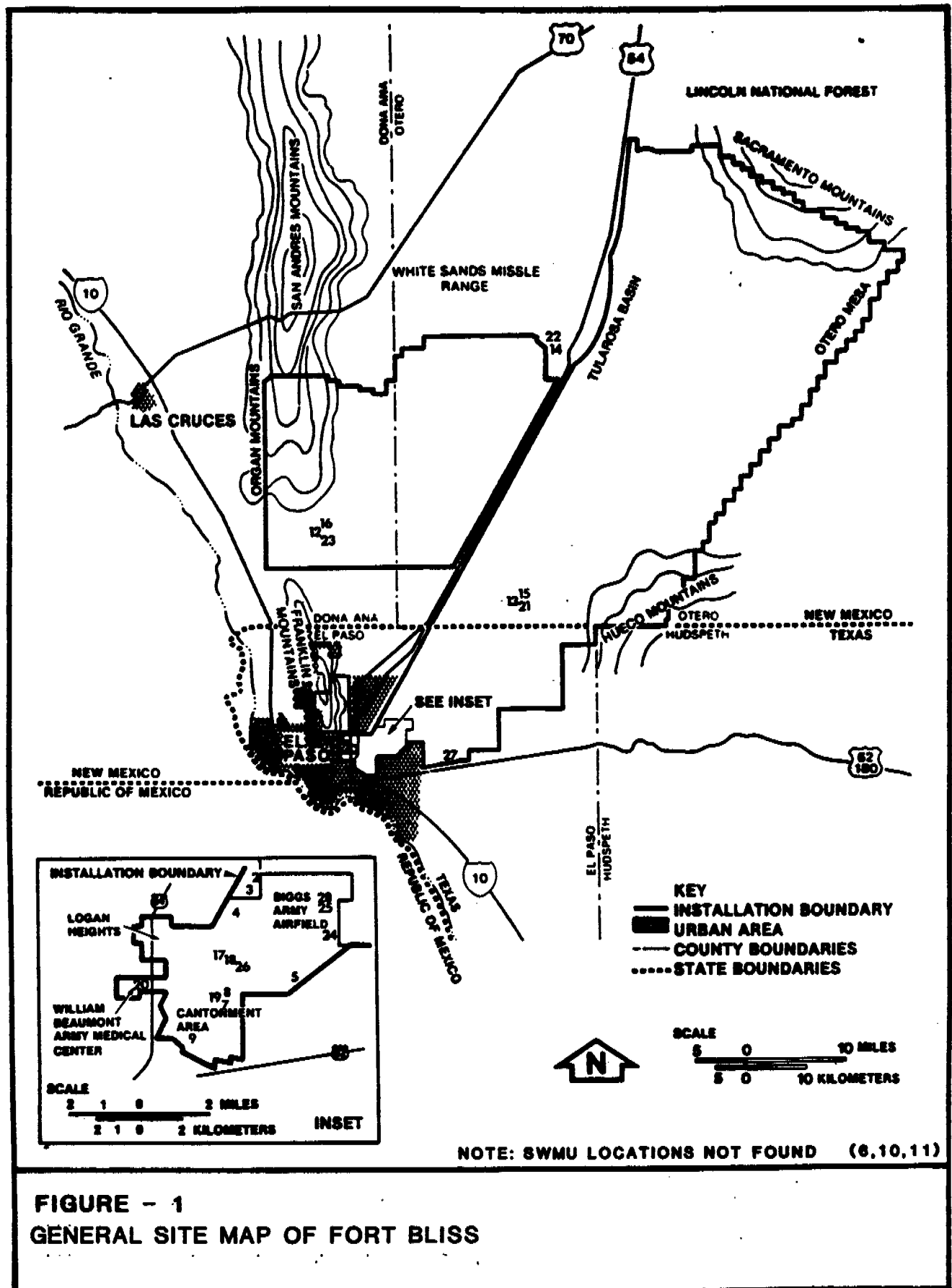
(3) The location of the site investigations described in this report are within the Tularosa Basin and include the cantonment area, sections of the Dona Ana-Oro Grande Range Complex, the McGregor Range and an area east of El Paso Airport adjacent to Site Monitor.

g. Site Hydrogeology.

(1) Physiography. Most of Fort Bliss is within the nearly level to gently rolling Tularosa Basin. The basin consists of shallow ephemeral lake beds, alluvial plains, and low sand dunes. Surrounding the basin, extending north to south, and tilted away from the basin, are isolated granitic intrusions and or outcrops of limestone and dolostone. Extending from the mountains are escarpments and coalesced alluvial fans with gentle to moderate slopes (references 8 and 17).

(2) Structural Geology and Seismic Activity.

(a) Uplifting, characterized by high angle thrust faulting of areas to the east and west of the Tularosa Basin, accompanied by down-dropping of the basin (Tertiary period), produced the present mountain ranges. These uplifted block mountains are tilted away from the basin with beds dipping approximately 10 degrees. The basin has subsequently filled with unconsolidated sediments (late Tertiary and Quaternary) washed down from the surrounding mountains.





(b) Fort Bliss is in seismic risk zone I, the "Minor Risk of Damage" category. Earthquakes felt on the reservation in recent times have not been reported to have caused any significant damage (reference 17). Figures 2 and 3 provide additional information on geologic structure.

(3) Stratigraphy. The stratigraphy underlying the Tularosa Basin includes Quaternary unconsolidated alluvial deposits composed of sands, gravels and caliche ranging from 0 to 2,743 meters to bedrock (Figure 3). The alluvium contacts the Hueco limestone formation to the east and a Precambrian granite formation to the west (Figure 3). Gravels and boulders mixed with sand and silts grading to finer-grained deposits in lower basin areas, characterize mountain and escarpment faces.

(4) Surface Hydrology. There are no natural perennial bodies of surface water on the FTBL reservation. Average annual rainfall is 8 inches per year, and the evapotranspiration rate is 110 inches (net loss of 102 inches). The combined depth to ground water, low precipitation, high evapotranspiration rate and soils of poor permeability render infiltration to a minimum, except in areas of fracturing.

(5) Ground Water.

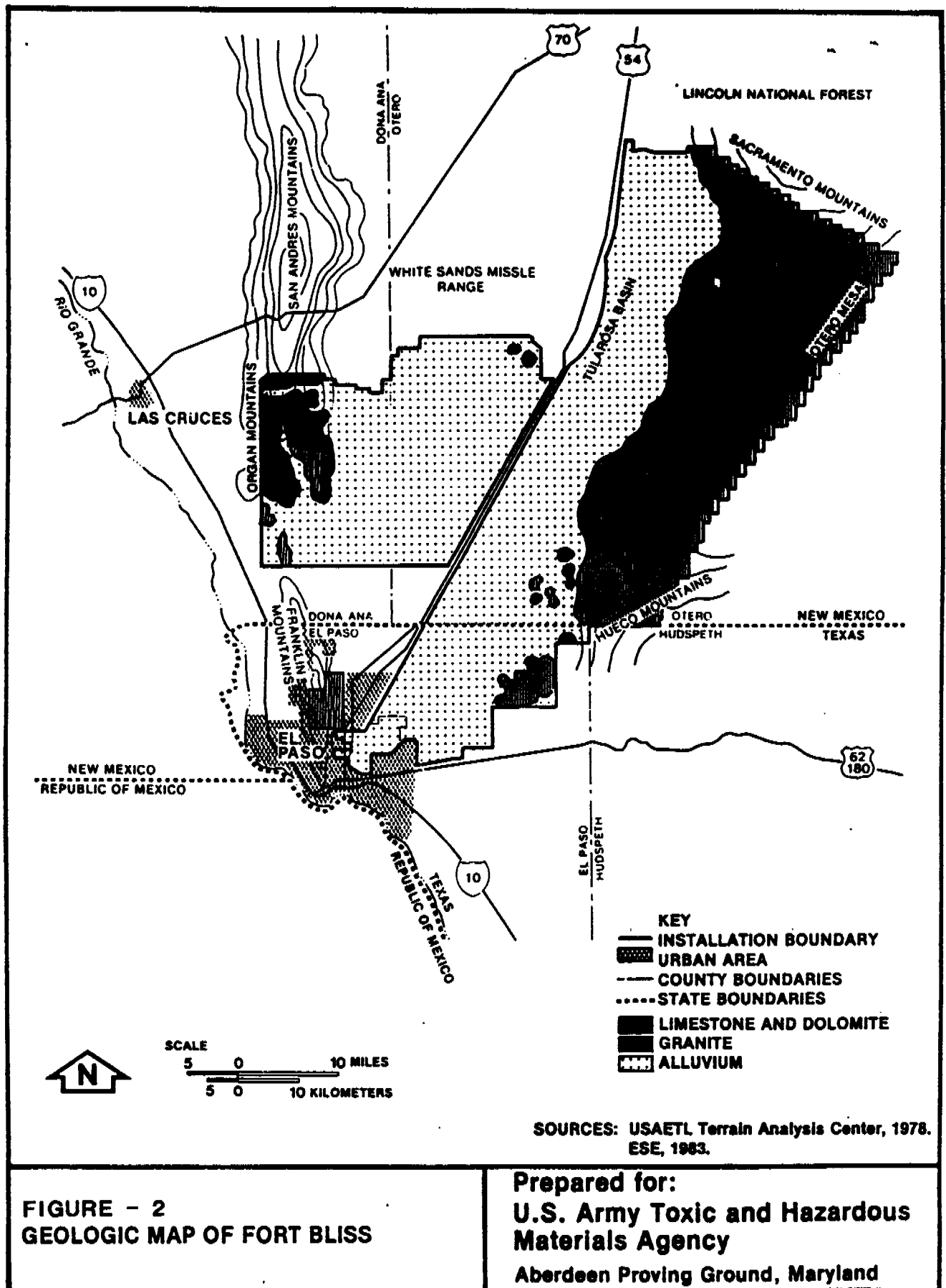
(a) The Hueco Bolson aquifer, situated in the unconsolidated deposits overlying bedrock holds ground water beneath FTBL. This aquifer is in the wedge shaped Quaternary alluvium sands and gravels and is not directly associated with the adjacent Hueco limestone formation. Water from the Hueco Bolson formation is predominantly brackish; however, a fresh potable lense exists in its upper portion. Except near the gravely alluvial fans in higher elevations, very little recharge occurs due to the near impermeable crusty caliche. Therefore, the aquifer is generally regarded as semiconfined. As a consequence of excessive pumping and limited recharge, fresh water elevations are rapidly declining. Depth to water ranges from 78 to 105 m below the land surface.

(b) Twelve active water supply wells provide FTBL with 75 percent of its fresh water. The FTBL purchases the balance of its potable water needs from the municipality of El Paso.

#### 4. FINDINGS AND DISCUSSION.

a. General. Appendix C is a listing of SWMU's at FTBL. This listing includes the location, type, size, description of activities and wastes of each unit. Table 1 is a listing of the SWMU's by name and type.

b. Hazardous Constituent Releases. Table 2 is a list of SWMU's which have or may have released hazardous constituents to the environment. These sites require further work to determine if a threat to human health or the environment exists. Table 3 is a list of SWMU's designated for recommended environmental action for cleanup or other measures for compliance with RCRA regulations. Table 4 is a summary of SWMU's with no releases to the environment and requires no further action.



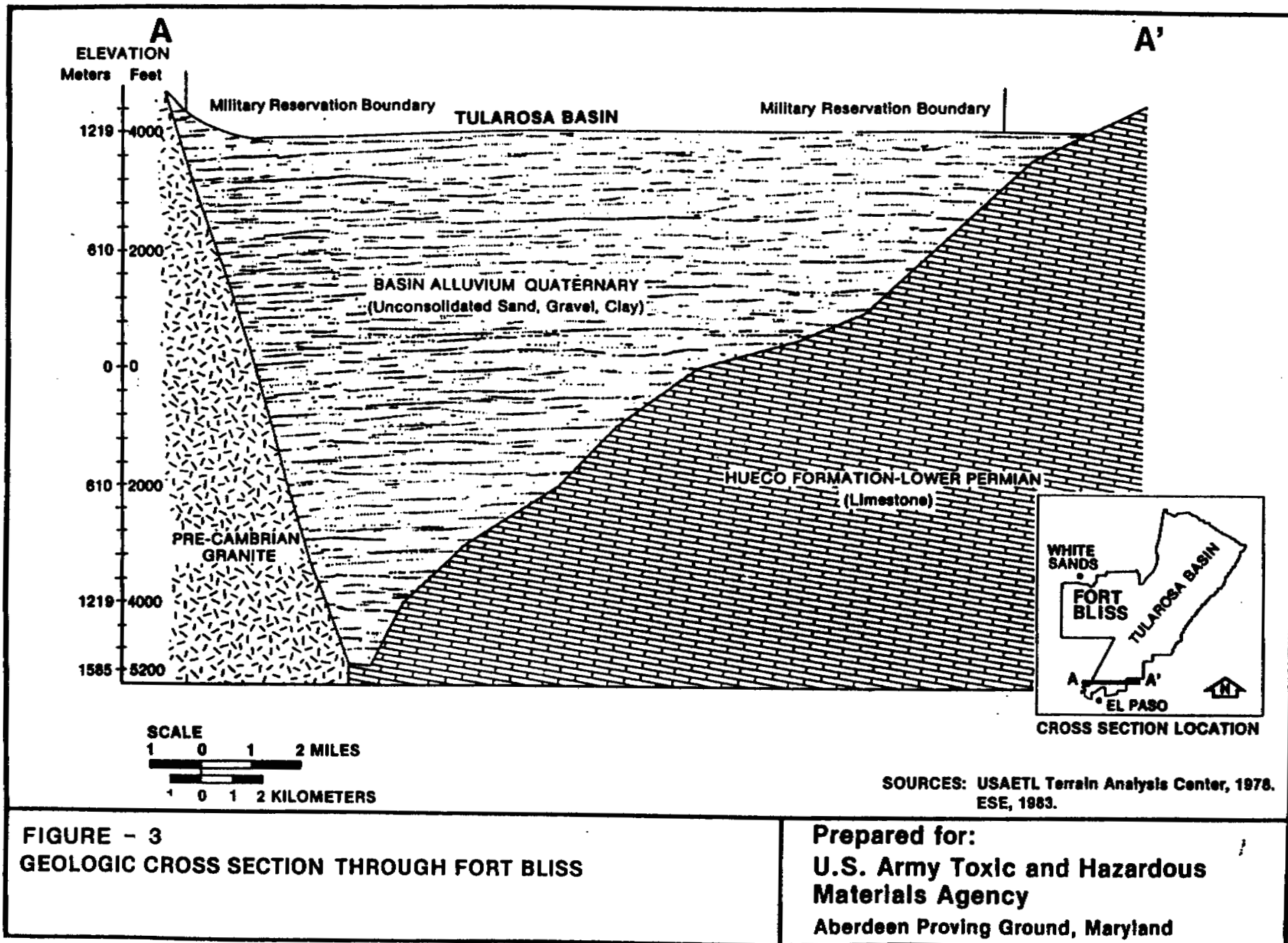


TABLE 1. SWMU's, FORT BLISS, TEXAS

SWMU Site Number	SWMU	Category	USATHAMA Report Number
FTBL-001	Sanitary Landfill	Landfill	1
FTBL-002	Sanitary Landfill	Landfill	2
FTBL-003	Rubble Landfill	Landfill	3
FTBL-004	Sanitary Landfill	Landfill	4
FTBL-005	Sanitary Landfill	Landfill	5
FTBL-006	Sanitary Landfill	Landfill	6
FTBL-007	Sanitary Landfill	Landfill	7
FTBL-008	Disposal Area	Surface Impoundment	8
FTBL-009	Disposal Area	Landfill	9
FTBL-010	Landfill	Landfill	10
FTBL-011	Sanitary Landfill	Landfill	11
FTBL-012	Rubble Pit	Landfill	12
FTBL-013	Rubble Pit	Landfill	13
FTBL-014	Rubble Pit	Landfill	14
FTBL-015	Open Demolition Area	Waste Treatment	
FTBL-01	Open Demolition Area	Waste Treatment	
FTBL-017	Raytheon Chromic Acid Pit	Surface Impoundment	
FTBL-018	Biggs Army Airfield Fire Training Pit	Waste Treatment	
FTBL-019	Pesticide Storage and Mixing Area, Bldgs 60-36, 60-276	Container Storage	
FTBL-020	Pathological Incinerator (Natural Gas)	Waste Treatment	
FTBL-021	McGregor Oxidation Lagoon,	Wastewater Treatment Unit	
FTBL-022	OroGrande Oxidation Lagoon	Wastewater Treatment Unit	
FTBL-023	Dona Ana Oxidation Lagoon	Wastewater Treatment Unit	
FTBL-024	NCO Academy Oxidation Lagoon	Wastewater Treatment Unit	
FTBL-025	HW/PCB Storage Facility	Container Storage	
FTBL-026	Raytheon HW Storage Facility	Container Storage	
FTBL-027	Rubble Dump (Active)	Landfill	
FTBL-028	Fire Fighting Training Area (old)	Waste Treatment	

TABLE 2. SWMU's WITH KNOWN OR SUSPECTED RELEASE OF HAZARDOUS CONSTITUENTS

SWMU	Unit Type	Release(s)
FTBL-017	Raytheon Chromic Acid Pit	Chromic Acid Hexavalent chromium
FTBL-018	Biggs Army Airfield Fire Fire Training Pit	Chlorinated Solvents
FTBL-019	Pesticide Storage and Mixing Area, Bldgs 60-36, and 60-267	Chlordane known, other pesticides suspected (malathion, DDT, and diazinon)
FTBL-025	HW/PCB Storage Facility	PCBs
FTBL-028	Fire Training Area (Old)	Chlorinated Solvents

TABLE 3. SWMU's WITH KNOWN OR SUSPECTED RELEASES TO THE ENVIRONMENT  
(excluding SWMU's listed in Table 2)

SWMU	Unit Type	Release(s)
FTBL-002	Active Sanitary Landfill	Waste Oil
FTBL-015	Open Demolition Area Active OD Area	Suspected Explosives and/or Heavy Metals
FTBL-016	Open Demolition Area Active OD Area	Suspected Explosives and/or Heavy Metals
FTBL-024	NCO Academy Oxidation Lagoon	Fuel Spill (large quantity)
FTBL-027	Active Rubble Dump	POL spill

TABLE 4. SWMU's WITH NO EVIDENCE OF RELEASE TO THE ENVIRONMENT, REQUIRING NO FURTHER ACTION

SWMU	Unit Type	Unit Status
FTBL-003	Rubble Landfill	Closed
FTBL-004	Sanitary Landfill	Closed
FTBL-005	Sanitary Landfill	Closed
FTBL-006	Sanitary Landfill	Closed
FTBL-007	Sanitary Landfill	Closed
FTBL-008	Disposal Area	Closed
FTBL-009	Disposal Area	Closed
FTBL-010	Landfill	Closed
FTBL-011	Sanitary Landfill	Closed
FTBL-012	Landfill	Active
FTBL-013	Landfill	Active
FTBL-014	Landfill	Active
FTBL-020	Pathological Incinerator (Natural Gas)	Active
FTBL-021	McGregor Oxidation Lagoon	Active
FTBL-022	Oro Grande Oxidation Lagoon	Active
FTBL-023	Dona Ana Oxidation Lagoon	Active
FTBL-026	Raytheon HW Storage Facility	Active

c. Report Schedule.

(1) This is an interim final report. The installation should forward a copy of this report to EPA Region VI for review and comment. At the same time, arrange for a VSI at FTBL. Appendix D is an example letter to the EPA.

(2) Once EPA reviews the manuscript and conducts a VSI on FTBL with the appropriate personnel, we will issue a final report. The installation should include a copy of the final report with their RCRA Part B application to the EPA.

5. CONCLUSIONS.

a. The SWMU's on Table 2 display evidence of release or the potential for release of hazardous constituents. These SWMU's require additional investigation.

b. The sites on Table 4 require no additional investigation because of an ongoing study or low potential for release of HW's to the environment.

6. RECOMMENDATIONS.

a. To ensure regulatory compliance with 40 CFR 264.101 and 40 CFR 270.14 we recommend the following:

(1) Forward this report for review by State and EPA region regulatory authorities.

(2) Arrange a VSI at FTBL with State, EPA and this Agency.

(3) FTBL-002: remove waste oil and implement soil sampling and analysis plan.

(4) FTBL-015: implement soil sampling and conduct reactivity testing.

(5) FTBL-016: implement soil sampling and conduct reactivity testing.

(6) FTBL-017: continue with ongoing closure of site (40 CFR 264.111-115).

(7) FTBL-018: continue with ongoing closure and drum disposal actions (40 CFR 264.111-115).

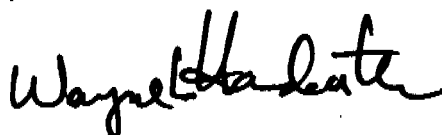
(8) FTBL-019: implement soil sampling and analysis plan.

(9) FTBL-024: implement soil sampling and remedial action for spill cleanup.

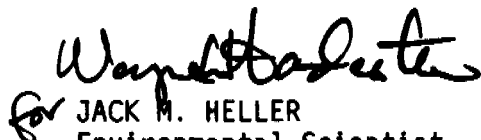
- (10) FTBL-025: implement soil sampling and analysis plan for potential PCB contamination. Store PCBs in accordance with 40 CFR 761.65.
- (11) FTBL-027: close open dump (40 CFR 257.1), and sample spill.
- (12) FTBL-028: continue ongoing closure of site in accordance with closure plan for FTBL-018 (40 CFR 264.111-115).

7. TECHNICAL ASSISTANCE. Refer questions concerning this consultation to Mr. Wayne L. Hardcastle or Chief, Waste Disposal Engineering Division, this Agency, AUTOVON 584-2024 or commercial (301) 671-2953.

8. REFERENCES. See Appendix E for references cited in text and sources used for SWMU-detailed descriptions.



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for

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APPROVED:



DAVID C. GUZEWICH  
Program Manager  
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APPENDIX A

PERSONNEL CONTACTED

DIRECTORATE OF ENGINEERING AND HOUSING, ENVIRONMENTAL PROTECTION,  
OFC-ATZC-DEH-E

Mr. Fazlur Rab, Chief

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Mr. Luis M. Acuna, Environmental Technician

Ms. Alleta Duvall, student contractual employee

FWLER CORPORATION, LANDFILL NO. 1 CONTRACTOR

Mr. Edwardo Hernandez, Operator, Landfill No. 1 (FTBL-1)

APPENDIX B

ABBREVIATIONS AND DEFINITIONS

AR	Army Regulation
AVGAS	Aviation Gasoline
BAA	Biggs Army Airfield
CFR	Code of Federal Regulations
DEH	Directorate of Engineering and Housing
disposal	The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid or hazardous waste into or on land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters (as defined in 40 CFR 260.10)
EOD	Explosive Ordnance Detachment
EPA	U.S. Environmental Protection Agency
EP Toxicity	A hazardous waste characteristic defined in 40 CFR 261.24
FR	Federal Register
FTBL	Fort Bliss, Texas
HSWA	Hazardous and Solid Waste Amendments of 1984
HW	Hazardous waste - a hazardous waste as defined in 40 CFR 261.3
HWM	Hazardous Waste Management
Ignitability	A hazardous waste characteristic defined in 40 CFR 261.3
Incineration	A method of thermal treatment of general, infectious, or pathological waste
JP-4	Jet propulsion fuel

kg	Kilogram
mg/L	milligram per liter
MSL	Mean sea level
OB	Open burning
OD	Open detonation
PCB	Polychlorinated biphenyl
pH	Measure of the acidity and basicity of an aqueous solution ranging from 0-14 standard units
POL	Petroleum, oils, and lubricants
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act of 1976
Reactivity	A hazardous waste characteristic defined in 40 CFR 261.23
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
SLF	Permitted sanitary landfill - A landfill that has State or Federal approval to operate and is operated in a manner that protects health and the environment. Waste is compacted and covered with earth daily; scavenging is strictly prohibited; and it is not an attractant to vermin (as defined in AR 40-5, Glossary, Section II)
solid waste	Solid waste as defined in 40 CFR 260.10
SWMU	Solid Waste Management Unit
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
TNT	Trinitrotoluene
TRADOC	U.S. Army Training and Doctrine Command
USAEHA	U.S. Army Environmental Hygiene Agency
VSI	Visual Site Inspection
µg/g	microgram per gram

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## APPENDIX C

### SWMU's DETAILED DESCRIPTION AND ENVIRONMENTAL RECOMMENDATIONS

1. UNIT NAME: FTBL-001, Landfill No. 1.

a. Type of Unit. Active Sanitary Landfill.

b. Location of Unit. See Figure C-1.

c. Unit Description. This currently operating trench and fill-type landfill (Permit No. 1422, Texas Department of Health, expiration 2002) encompasses approximately 106 acres. A bulldozer covers and compacts the waste daily.

d. Dates of Operation. 1974 to present.

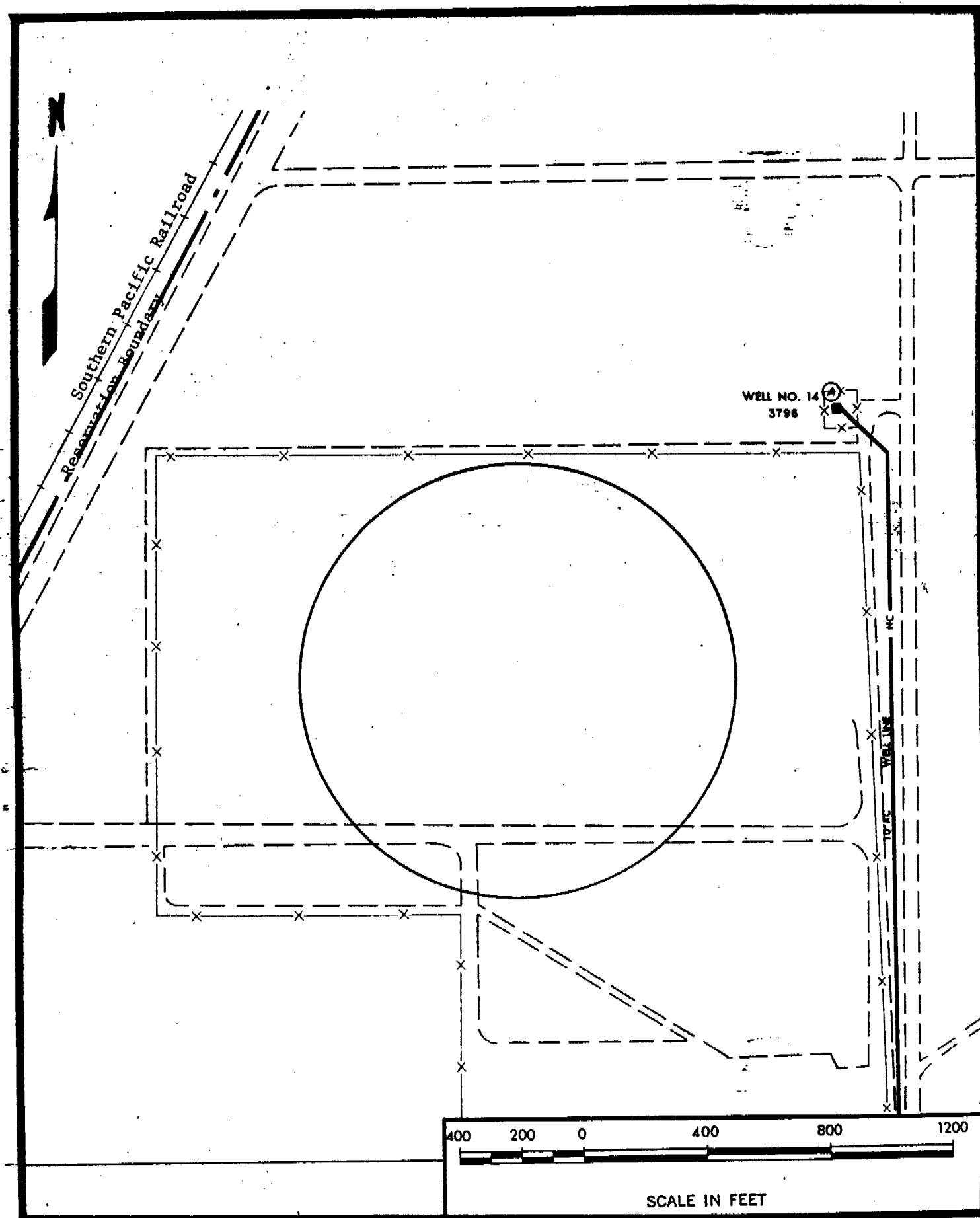
e. Waste Description. Waste consists mainly of municipal-type refuse but also includes the disposal of hospital incinerator ash.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None known.

h. Environmental Recommendations. None. The northeast corner of the landfill site is adjacent to the Fort Bliss Water Supply Well No. 14; however, it is improbable that leachate would contaminate the well water. First with average annual rainfall less than 10 inches and average evaporation rates near 100 inches, it is unlikely that leachate would develop. Secondly, the shallowest aquifer tapped by the well is protected by more than 50 feet of impermeable clay as part of the 250 feet of overlying sediments. Therefore, should leachate develop, its migration would be mitigated by these impermeable layers.

i. References. 1, 2, 7, 10, 12.



**FIGURE C-1**

**ACTIVE SANITARY LANDFILL (FTBL-001)**

2. UNIT NAME: FTBL-002, Landfill No. 2.

a. Type of Unit. Closed Sanitary Landfill.

b. Location of Unit. See Figure C-2.

c. Unit Description. This trench-type landfill encompasses approximately 101 acres. It is reported that there is 2 feet of earth cover. Abandoned trenches and subsidence is evident. Six to eight oblong pits are present, one of which is filled with suspected waste oil (approximately 30 feet X 100 feet). There is extensive open dumping of construction rubble in the area of the landfill. The abandoned trenches are vegetated.

d. Dates of Operation. 1957 to 1974.

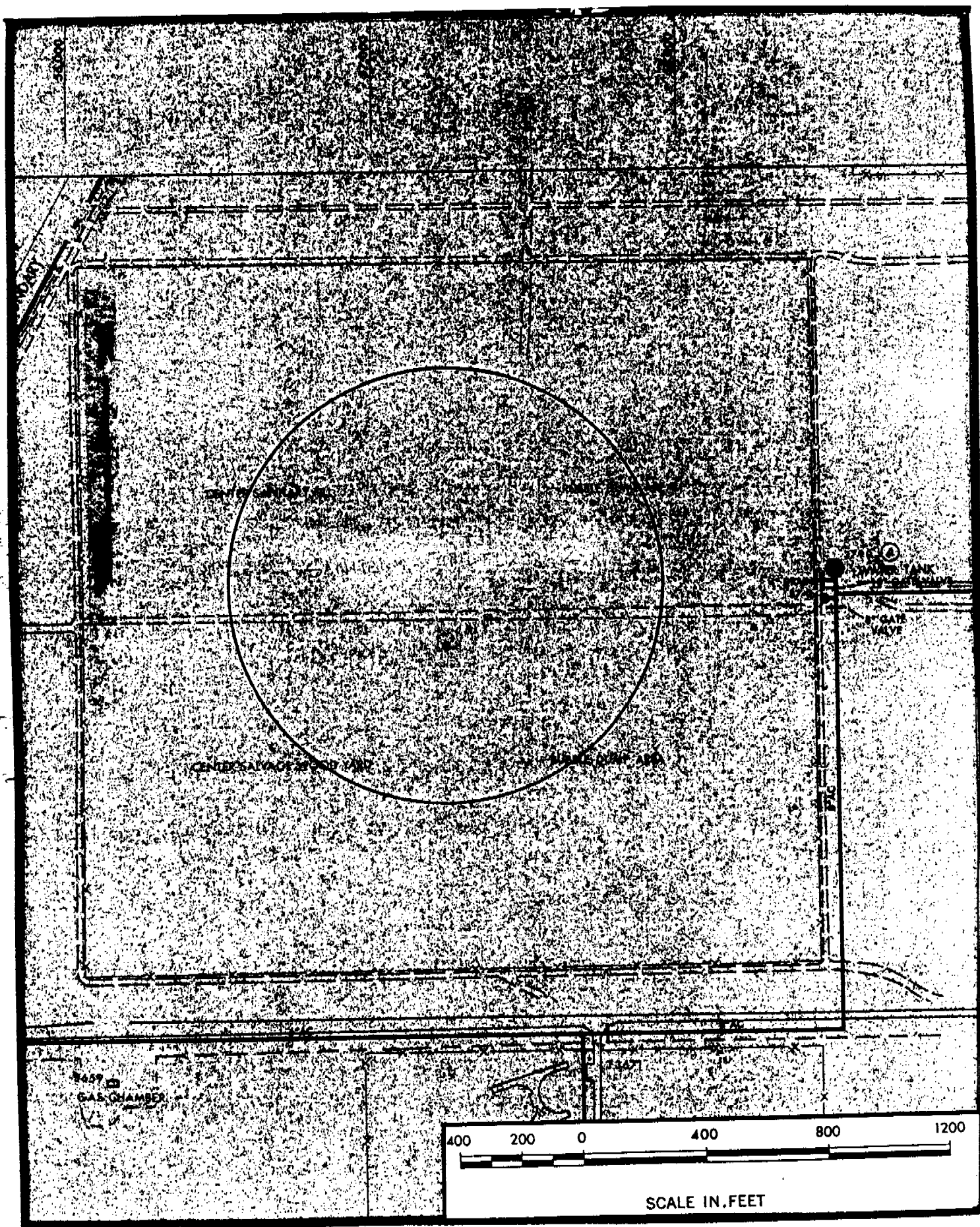
e. Waste Description. Reportedly, this landfill received the same types of materials that go into the current landfill (FTBL-001; see 1.e.).

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. Waste oil.

h. Environmental Recommendations. Landfill: The site of this former landfill is adjacent to the current landfill (FTBL-001) and, therefore, falls under the same environmental conditions (see paragraph 1h). Waste Oil: Remove waste oil. Prior to removal, waste oil must be tested for PCBs, flash point, lead, arsenic, cadmium, chromium and chlorinated solvents to determine proper disposal methodology. Following removal of waste oil, soil sampling should be conducted to determine migration of oil. If HW constituents are detected in the waste oil, soil removal and disposal may be required.

i. References. 1, 7.

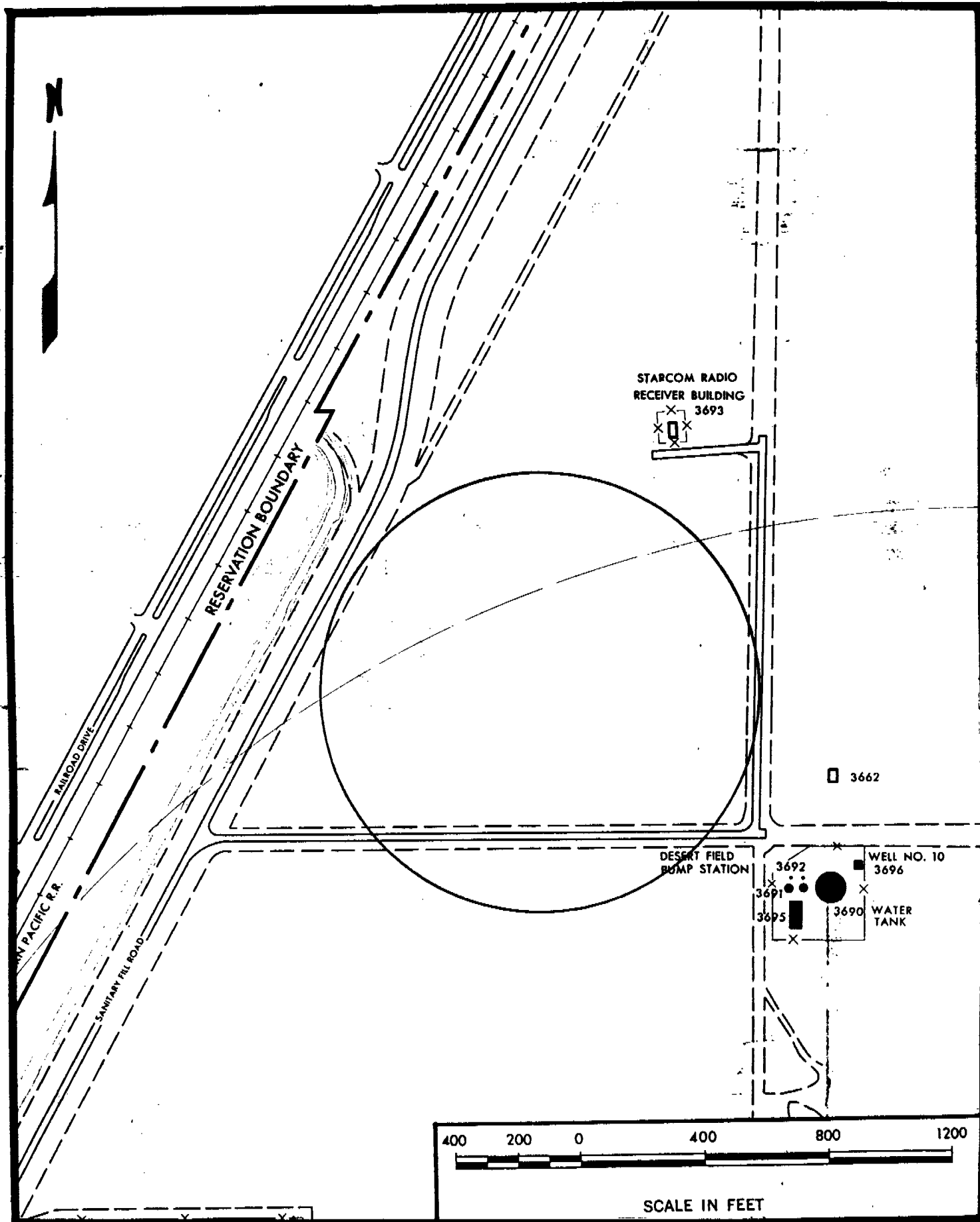


**FIGURE C-2**    **CLOSED SANITARY LANDFILL (FTBL-002)**



3. UNIT NAME: FTBL-003, Landfill No. 3.

- a. Type of Unit. Closed Rubble Landfill.
- b. Location of Unit. See Figure C-3.
- c. Unit Description. This trench-type landfill encompasses approximately 101 acres. The landfill is capped with 2 feet of earth cover.
- d. Dates of Operation. 1978 to 1982.
- e. Waste Description. Rubble, including an area of illegal dumping at approximately one-third square mile. Sand and gravel is extensive and is used onpost (gravel was deposited by the course of the ancient Rio Grande river).
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None known or suspected.
- h. Environmental Recommendations. None. The site of this former landfill is also in the vicinity of the current landfill (FTBL-001) and, therefore, falls under the same environmental conditions (see paragraph 1h).
- i. References. 1, 7.



**FIGURE C-3**      **CLOSED RUBBLE LANDFILL (FTBL-003)**

4. UNIT NAME: FTBL-004, Landfill No. 4.

a. Type of Unit. Closed Sanitary Landfill.

b. Location of Unit. See Figure C-4. The FTBL-004 is located offpost to the west of the Southern Pacific Railroad tracks. Real estate records for the period of operation are no longer available, but it is likely the landfill operated under an ingrant. As investigated in the field, there is no evidence of the existence of this landfill. The area where this landfill is said to be located will be excavated for housing in the near future.

c. Unit Description. This trench-type landfill encompasses 101 acres. The site was capped with 2 feet of earth cover.

d. Dates of Operation. 1954 to 1957.

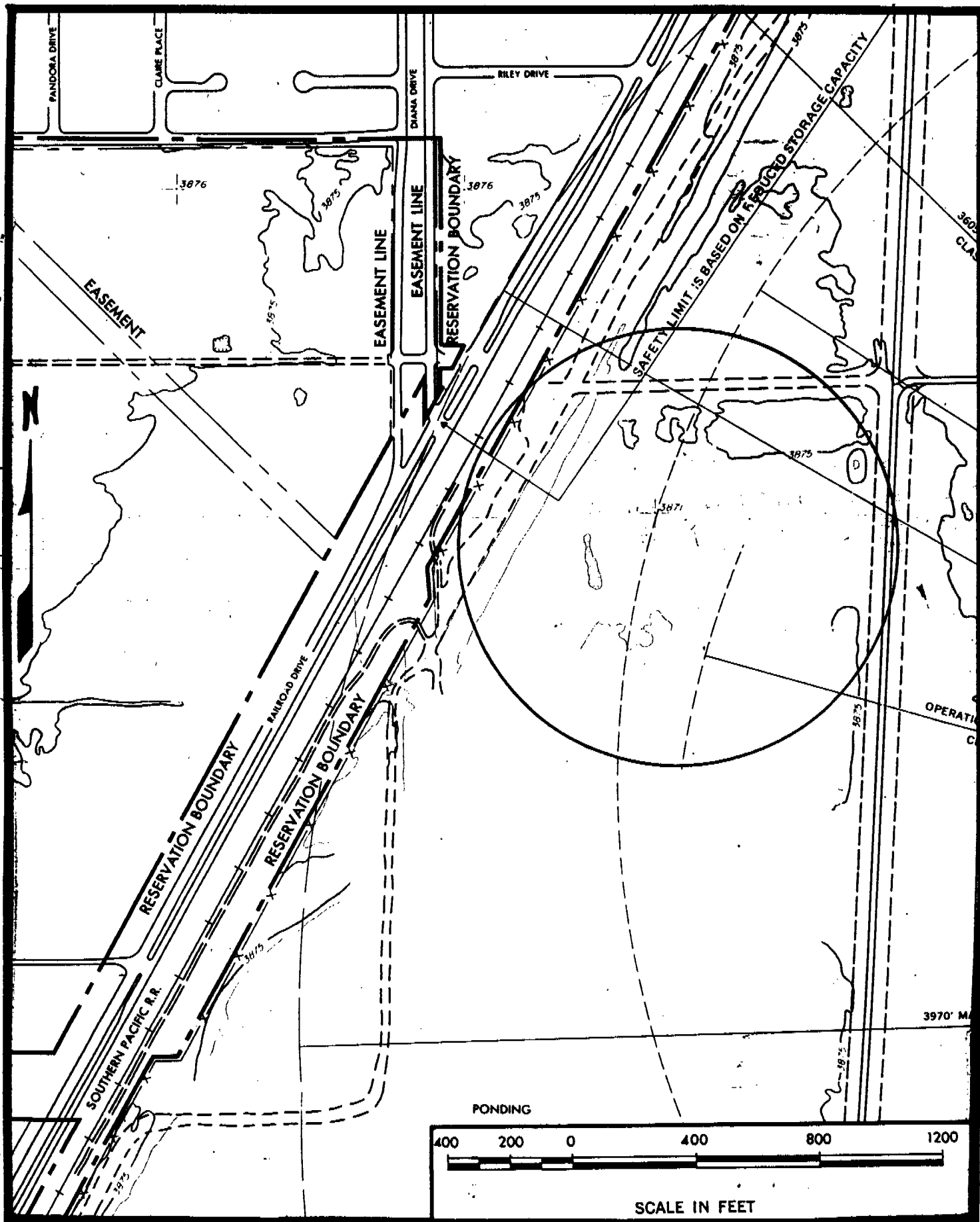
e. Waste Description. Reportedly, this landfill received the same types of materials that go into the current landfill (FTBL-001; see paragraph 1.e.).

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None known or suspected.

h. Environmental Recommendations. None.

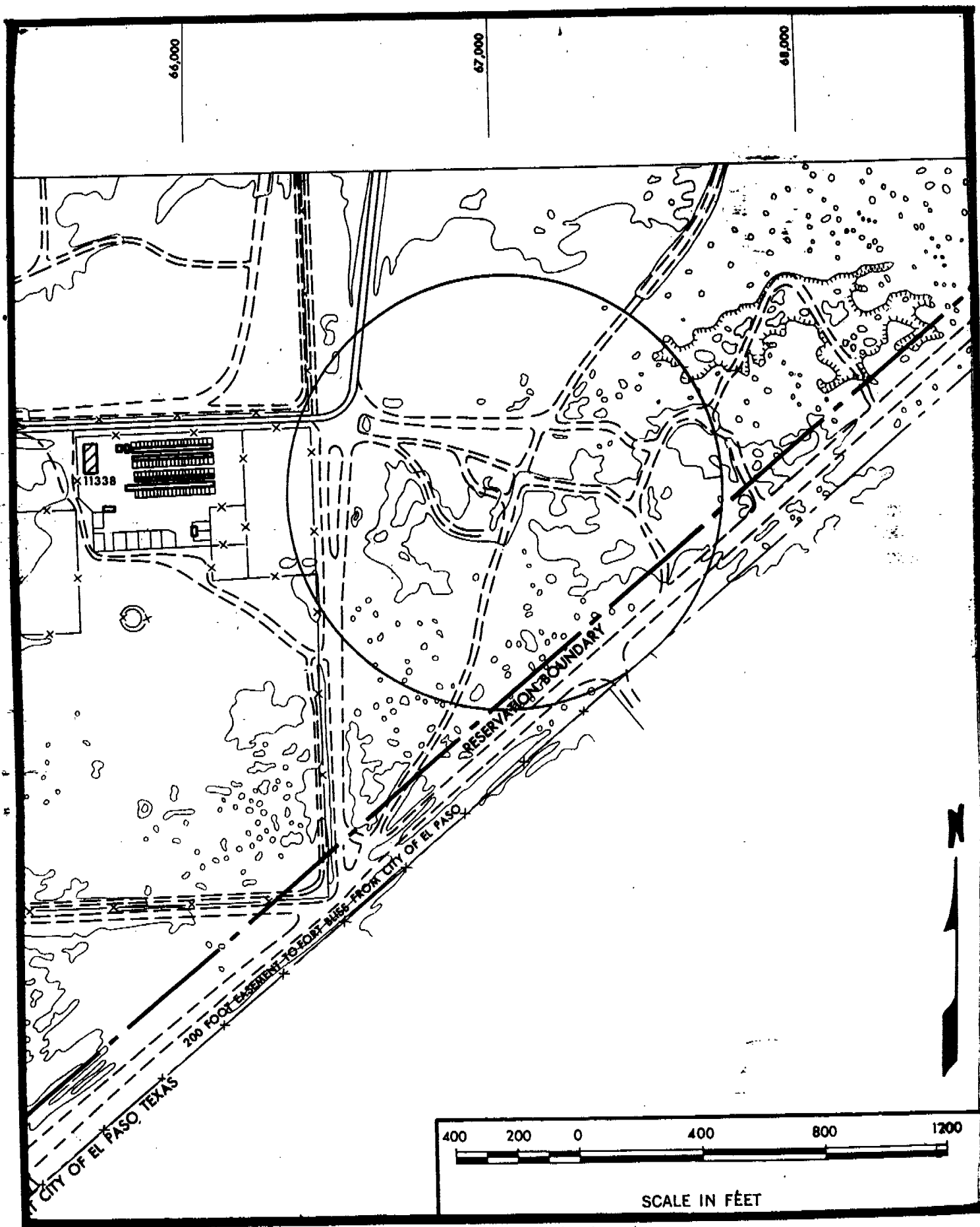
i. References. 1, 7.



**FIGURE C-4 CLOSED SANITARY LANDFILL (FTBL-004)**

5. UNIT NAME: FTBL-005, Landfill No. 5.

- a. Type of Unit. Closed Sanitary Landfill.
- b. Location of Unit. See Figure C-5.
- c. Unit Description. This landfill incorporates approximately 20 acres. The site was covered with 2 feet of earth cover. Four short trenches can be observed. Subsidence and mounding are present.
- d. Dates of Operation. 1947 to 1967.
- e. Waste Description. Household garbage. Nonindustrial. Observable wastes from field investigation are rubble, tree stumps, concrete, road material, and other construction debris.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None known or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.



**FIGURE C-5 CLOSED SANITARY LANDFILL (FTBL-005)**

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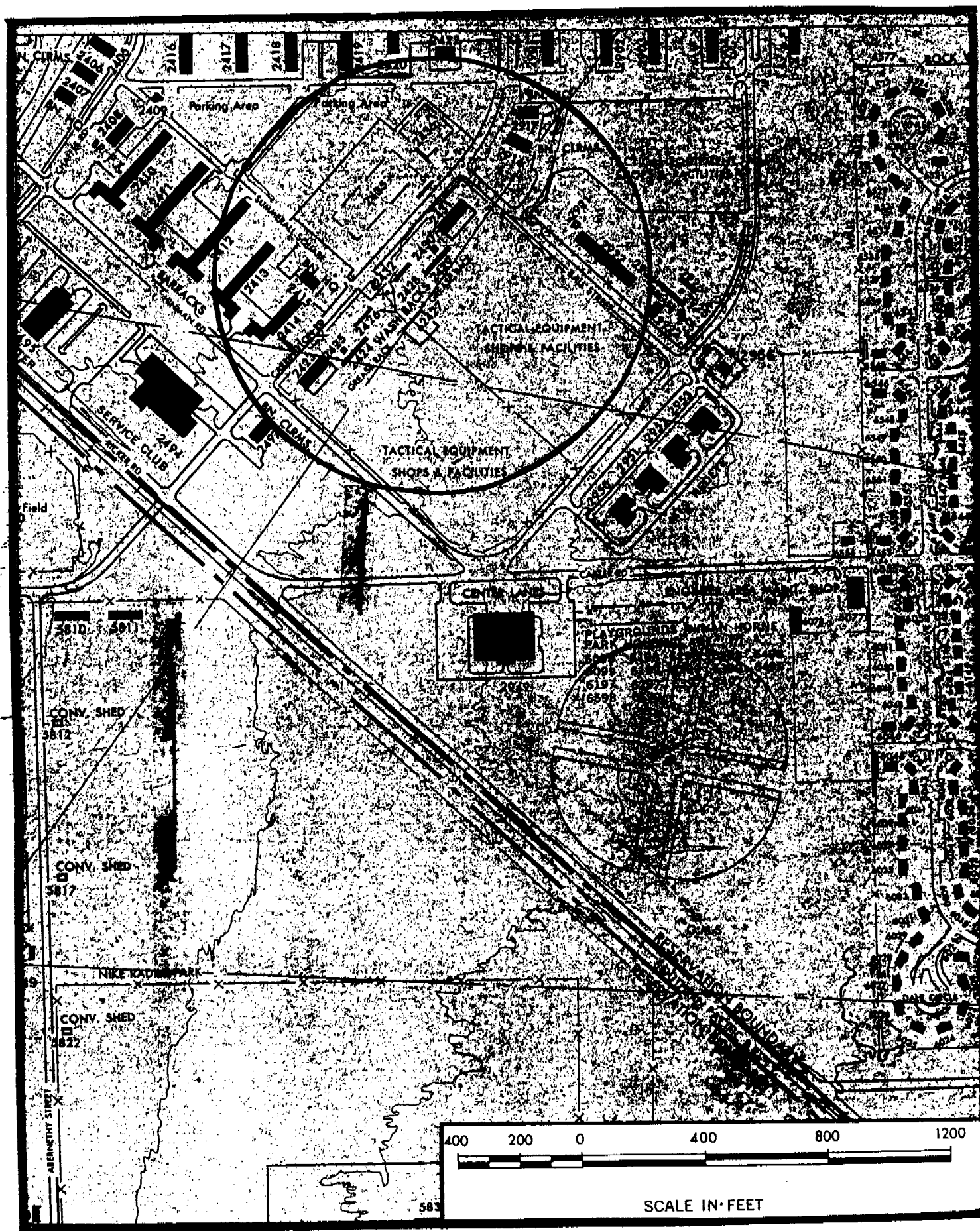
6. UNIT NAME: FTBL-006, Landfill No. 6.

- a. Type of Unit. Disposal Area.
- b. Location of Unit. Disposal area has not been located.
- c. Unit Description. Area size approaches 99 acres. The landfill has an earth cover.
- d. Dates of Operation. 1947 to 1967.
- e. Waste Description. Household waste and Air Force parts and waste.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident.
- h. Environmental Recommendations. None.
- i. References. 1, 7, 12.

7. UNIT NAME: FTBL-007, Landfill No. 7.

- a. Type of Unit. Closed Sanitary Landfill
- b. Location of Unit. See Figure C-6.
- c. Unit Description. This site is a pre-WW II dump encompassing 5 acres. Waste was reported to have been covered periodically. Disposal area is developed into barracks and parking lots. There are no visible signs of this disposal site.
- d. Dates of Operation. 1940-1946.
- e. Waste Description. Horseshoes, bottles, timber, and paper.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.

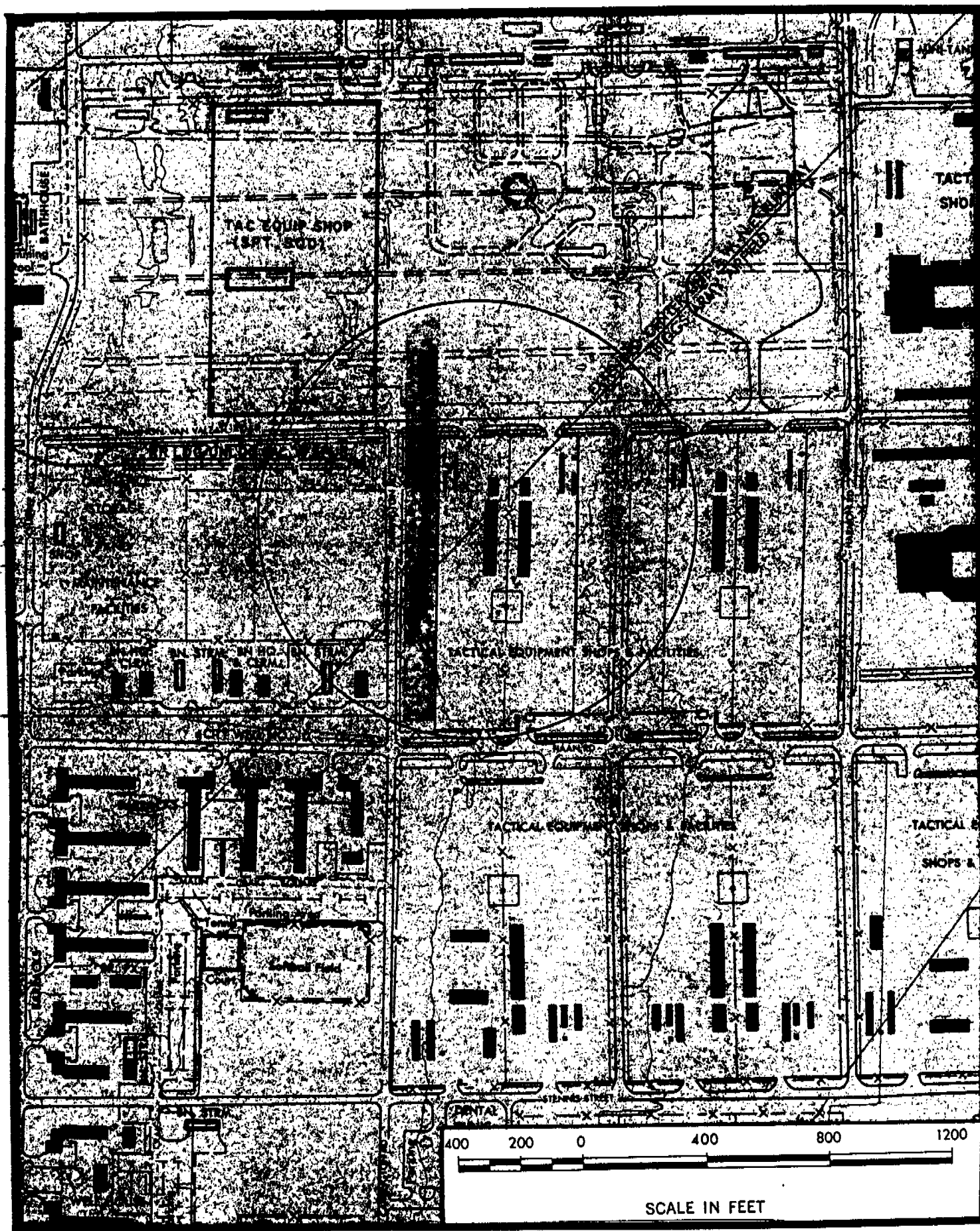




**FIGURE C-6 CLOSED SANITARY LANDFILL (FTBL-007)**

8. UNIT NAME: FTBL-008, Landfill No. 8.

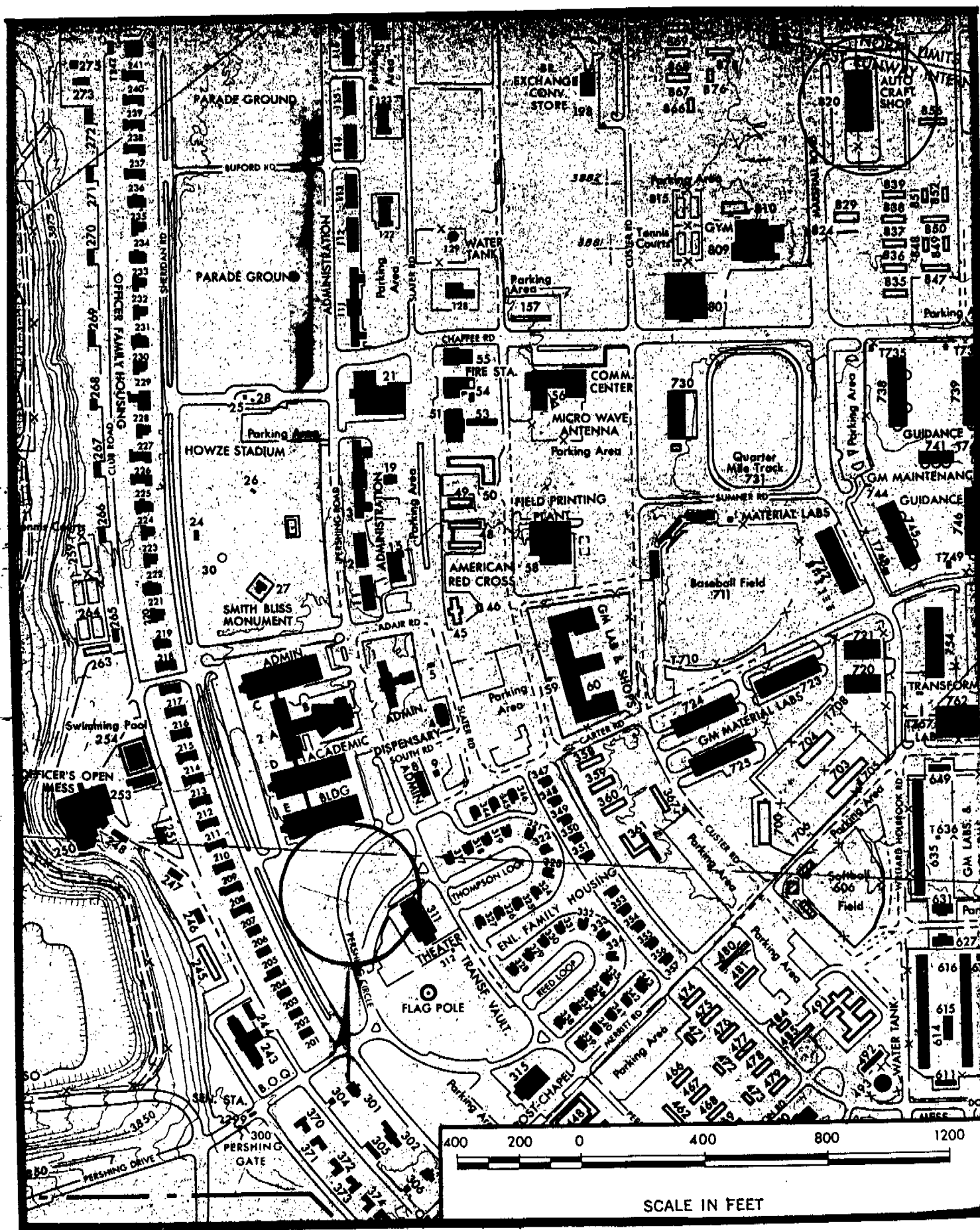
- a. Type of Unit. Closed Disposal Area.
- b. Location of Unit. See Figure C-7. The cantonment area masks the location and the surface of this disposal site.
- c. Unit Description. This was a pre-WWII site covering 15 acres. Waste is reported to have been covered periodically.
- d. Dates of Operation. Pre-WWII to 1940.
- e. Waste Description. Horseshoes, timber, bottles, and papers.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.



**FIGURE C-7 CLOSED DISPOSAL AREA (FTBL-008)**

9. UNIT NAME: FTBL-009, Landfill No. 9.

- a. Type of Unit. Closed Disposal Area.
- b. Location of Unit. See Figure C-8.
- c. Unit Description. Disposal site is completely covered and masked by the cantonment area, in the vicinity of Building No. 311. Area size is 10 acres. Waste is reported to have been covered periodically.
- d. Dates of Operation. 1942 to 1946.
- e. Waste Description. Horseshoes, bottles, and metals.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.



**FIGURE C-8 CLOSED DISPOSAL AREA (FTBL-009)**

10. UNIT NAME: FTBL-010, Landfill No. 10.

- a. Type of Unit. Closed Landfill.
- b. Location of Unit. Landfill has not been located.
- c. Unit Description. Not available. The FTBL DEH personnel report that this landfill has not been located.
- d. Dates of Operation. 1946-1950.
- e. Waste Description. Hospital wastes.
- f. Previous Environmental Monitoring. None known.
- g. Known/Suspected Releases. None known.
- h. Environmental Recommendations. None.
- i. References. 1, 7, 12.

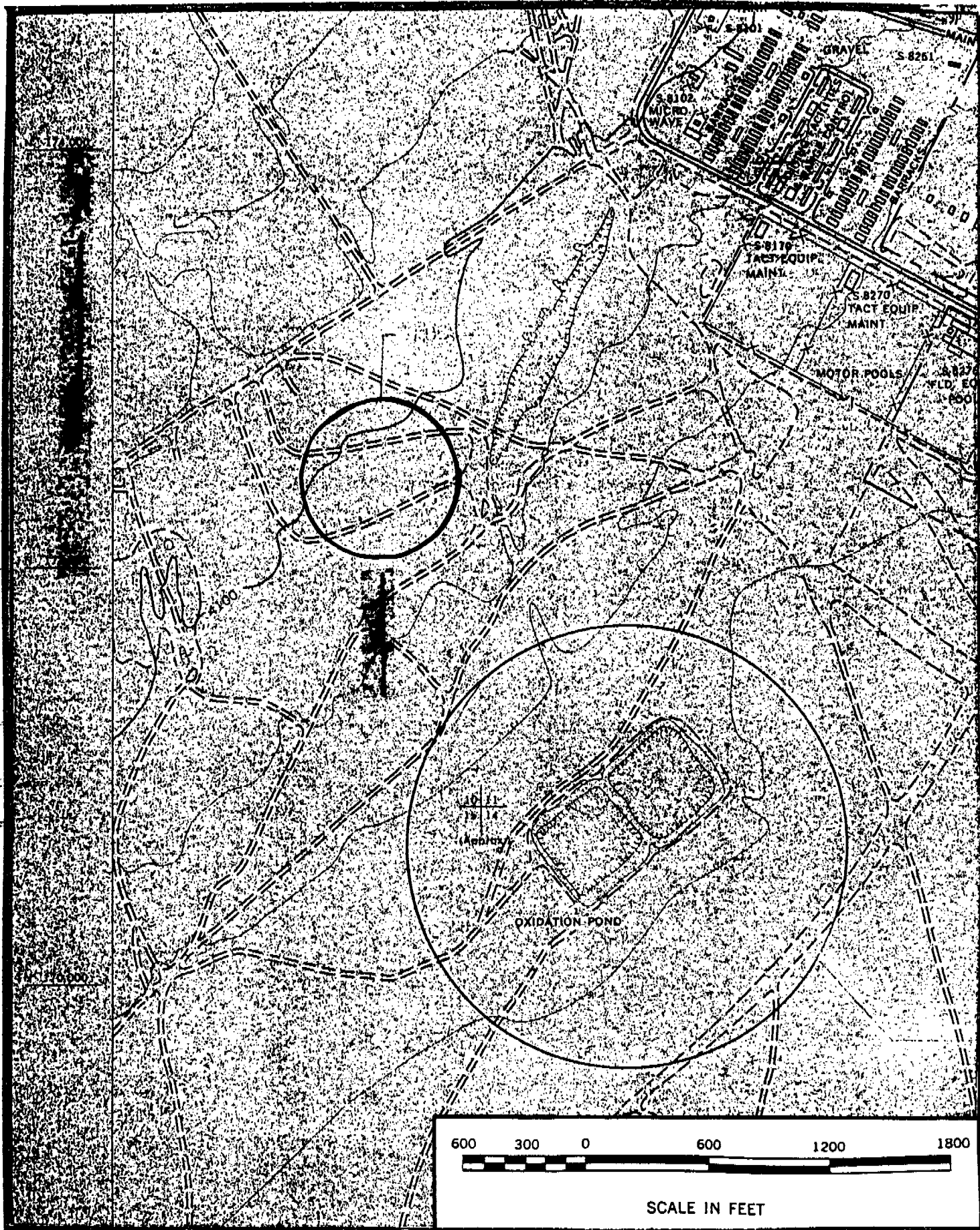
11. UNIT NAME: FTBL-011, Landfill No. 11.

- a. Type of Unit. Closed Sanitary Landfill.
- b. Location of Unit. Dona Ana Range is reported to be the location of this landfill. The landfill was not found during field investigation.
- c. Unit Description. This pre-WWII trench-type sanitary landfill encompasses an area of 5 acres. Waste is reported to have been covered periodically.
- d. Dates of Operation. Pre-WWII to 1945.
- e. Waste Description. Reported to be sanitary waste that includes horseshoes, timber, bottles, and paper.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None.
- h. Environmental Recommendations. None.
- i. References. 1, 7.

12. UNIT NAME: FTBL-012, Landfill No. 12.

- a. Type of Unit. Active Rubble Pit.
- b. Location of Unit. See Figure C-9. South of Dona Ana Range.
- c. Unit Description. This trench-type rubble pit encompasses an area of 2 acres. Reported to be covered once per month.
- d. Dates of Operation. 1983 to present.
- e. Waste Description. In addition to rubble, this pit receives small arms munitions about once every 3 months (approximately 6.8 to 9.1 kg per year). Large amounts of trash and garbage are present.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.





**FIGURE C-9 ACTIVE RUBBLE PIT (FTBL-012)**  
**BONA ANA**

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13. UNIT NAME: FTBL-013, Landfill No. 13.

a. Type of Unit. Active Rubble Pit.

b. Location of Unit. See Figure C-10. Located southeast of the McGregor Range.

c. Unit Description. This trench-type rubble pit encompasses 2 acres. Reported to be covered once per month.

d. Dates of Operation. 1983 to present.

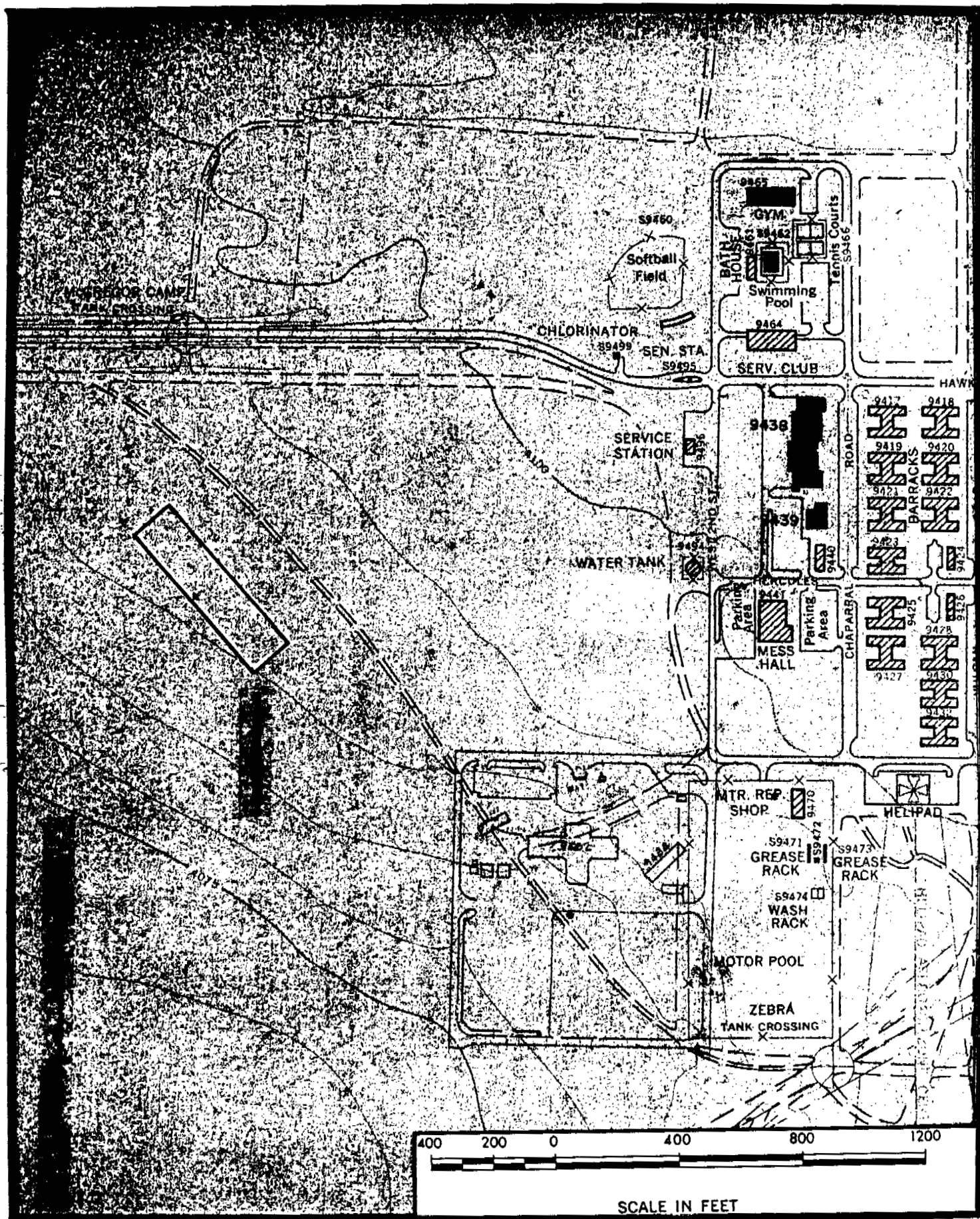
e. Waste Description. Trash and construction debris.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None evident or suspected.

h. Environmental Recommendations. None.

i. References. 1, 7, 11.

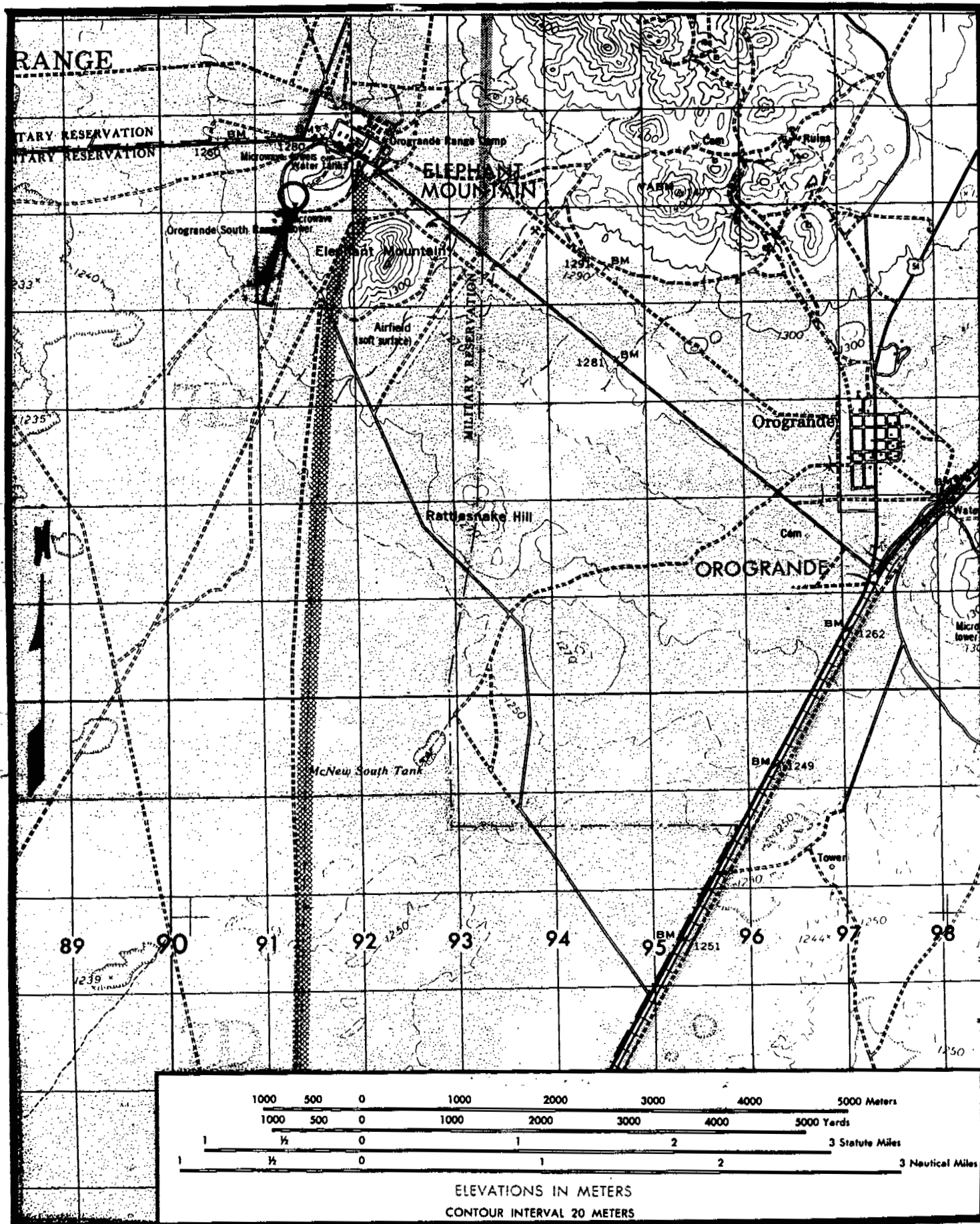


**FIGURE C-10 ACTIVE RUBBLE PIT (FTBL-013)**

14. UNIT NAME: FTBL-014, Landfill No. 14.

- a. Type of Unit. Active Rubble Pit.
- b. Location of Unit. See Figure C-11. Located south of the Oro Grande Range Complex.
- c. Unit Description. This trench-type rubble pit encompasses an area of 2 acres.
- d. Dates of Operation. 1983 to present.
- e. Waste Description. Rubble and trash. Illegal dumping of mostly metal was observed during field investigation.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.





**FIGURE C-11 ACTIVE RUBBLE PIT (FTBL-014)**  
**ORO GRANDE**

15. UNIT NAME: FTBL-015, EOD, EOD Open Demolition Area.

a. Type of Unit. Active Open Detonation Area.

b. Location of Unit. See Figures C-12 and C-13. East of the McGregor Rubble Pit.

c. Unit Description. The EOD range contains two demolition sites used for EOD and demolition training. The maximum explosive material limit at Demolition Site 1 (Patriot Site) is 453.6 kg (TNT equivalent). This site was used very infrequently by EOD personnel in the past and is no longer an active EOD site. This small site consists of two narrow pits with some lightly colored stains present. No shell bodies were observed. Unlimited amounts of explosive material are authorized at Demolition Site 2 (FAW 10). The 41st EOD conducts explosives demolitions at the EOD range approximately 2 to 3 times per quarter. Explosives are blown with C-4 in existing demolition pits, which are visually inspected following each blow. The demolition area is operated under RCRA interim status (40 CFR 265) as a HW thermal treatment facility. Quantities of explosives destroyed average approximately 900 kg per quarter, while demonstrations consist of 2.3 to 4.5 kg charges. Powder burning conducted by the 41st EOD ceased over 1 year ago and is not planned to occur in the foreseeable future. This was and still is the major EOD demolition site. Some shell bodies are present in the pit; however, no stains or burned areas were observed.

d. Dates of Operation. 1965 to present.

e. Waste Description. Explosives, unserviceable ammunition, and unexploded ordnance. According to the HW definition (40 CFR 261), residue from HW treatments are, themselves, considered to be hazardous by characteristic of reactivity until proven otherwise. Since the original explosive wastes treated are hazardous by characteristic of reactivity, the residues must also be considered reactive until proven otherwise.

f. Previous Environmental Monitoring. No sampling and analysis of residues generated by these activities have been performed.

g. Known/Suspected Releases. Suspected explosives and/or heavy metals.

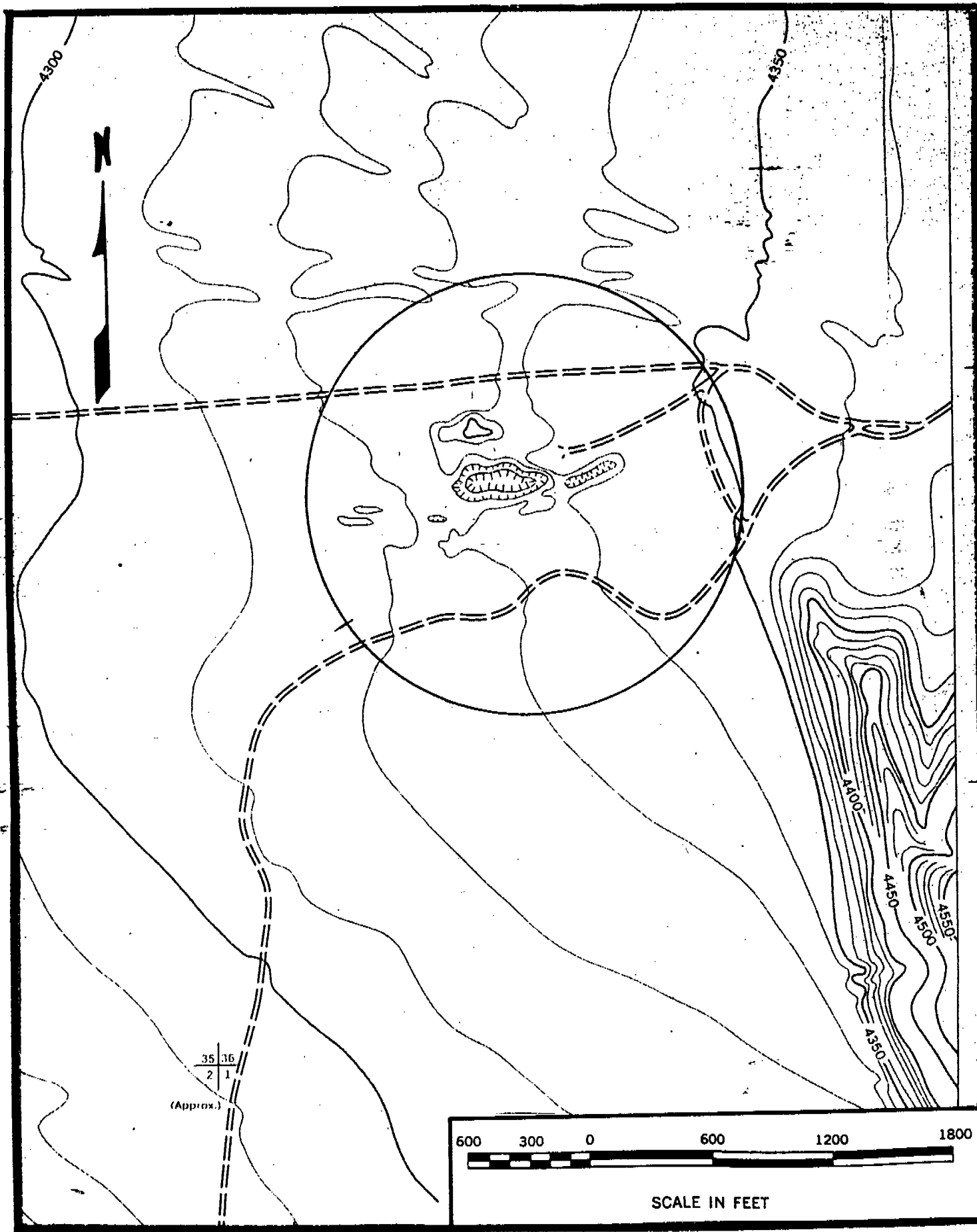
h. Environmental Recommendations.

(1) Implement soil sampling and analysis plan.

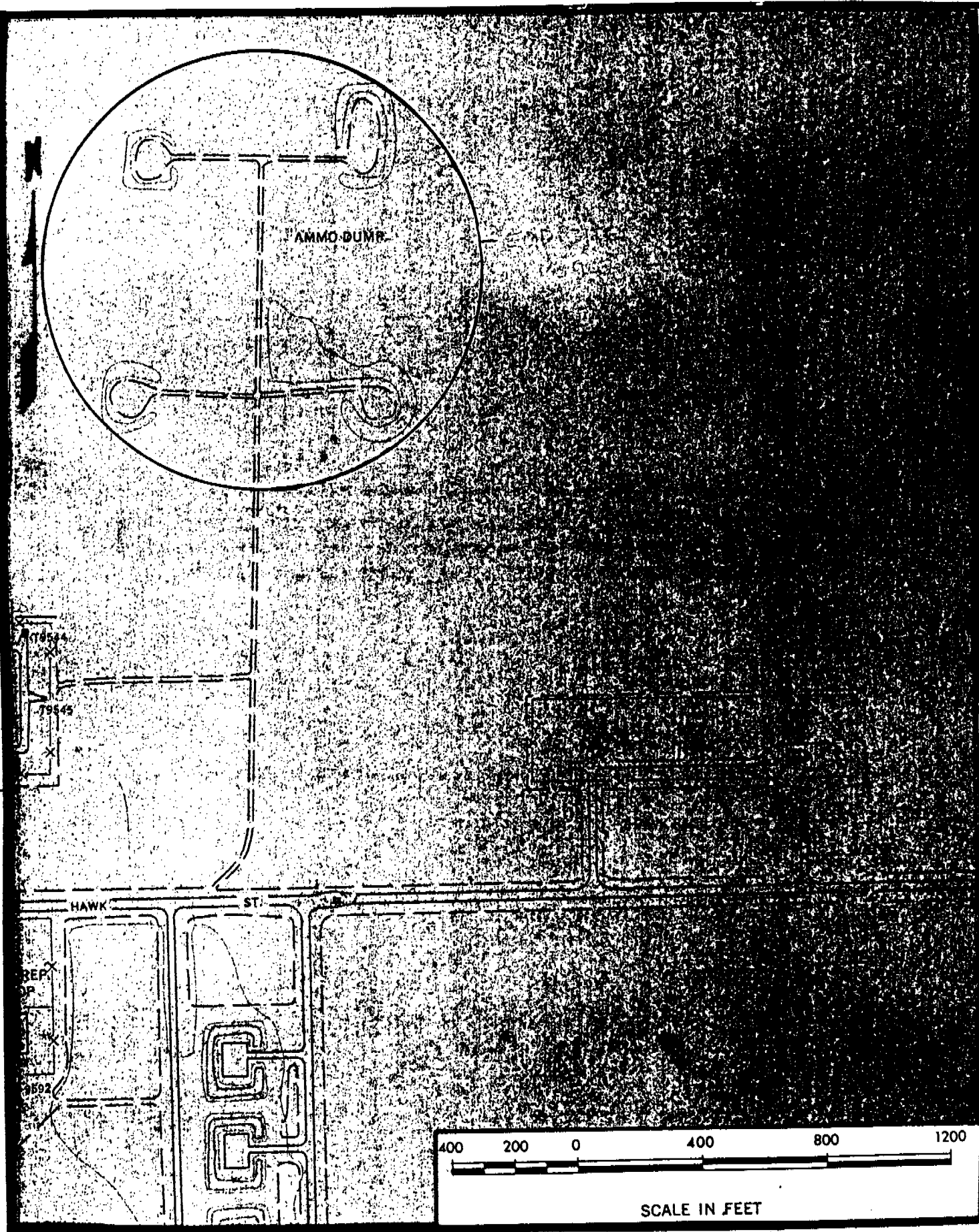
(2) Perform reactivity testing on selected samples.

(3) Perform metals analysis for arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

i. References. 1, 3, 7, 8.



**FIGURE C-12: ACTIVE OPEN DETONATION AREA (FTBL-015)**  
**MC OREGON**



**FIGURE C-13 ACTIVE OPEN DETONATION RANGE (FTBL-015)**  
**MC ERROR**



16. UNIT NAME: FTBL-016, Dona Ana Range 41.

a. Type of Unit. Open Detonation Range.

b. Location of Unit. See Figure C-14.

c. Unit Description. The OD disposal area consists of three small pits. No burn stains were observed during field investigation. The Dona Ana Range 41 is the primary demolition range for engineer construction, demolition, and training. Other participating units are the 52d Engineers and 43d Engineers Companies, and all air defense artillery units having emergency destruction procedures for weapons. This range is infrequently used for OD destruction by 41st EOD. Usage is limited to once or twice per year.

d. Dates of Operation. 1940 - Ongoing. Open detonation operations occur only once per year (on average).

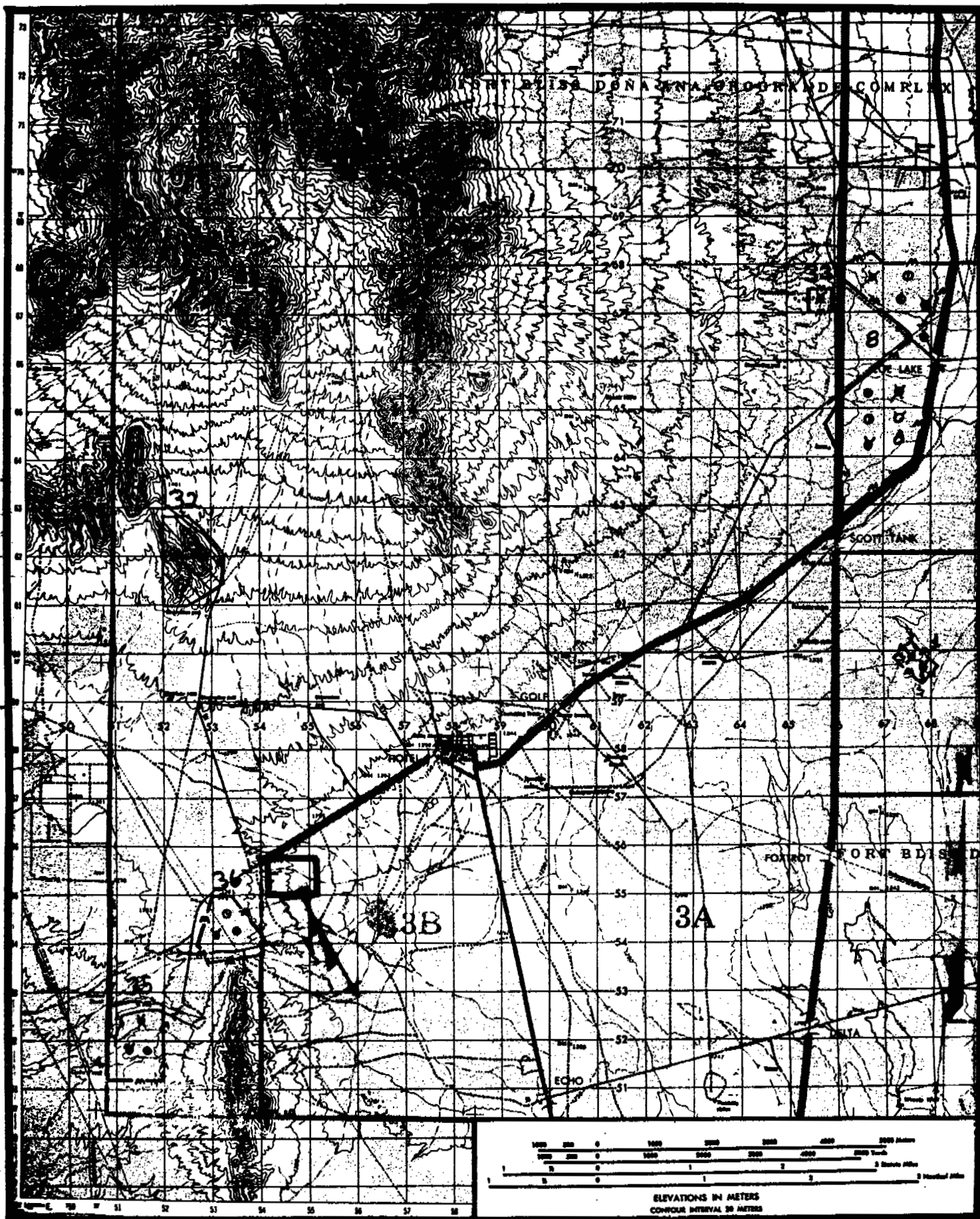
e. Waste Description. Authorized demolitions involve all types of weapons up to 145 kg (TNT equivalent), including Claymore mines and Sharpe charges.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. Suspected explosives and/or heavy metals.

h. Environmental Recommendations. Identical to FTBL-015.

i. References. 1.



**FIGURE C-14 DONA ANA ACTIVE OPEN DETONATION RANGE (FTBL-016)**

17. UNIT NAME: FTBL-017, Raytheon Chromic Acid Dump Pit.

a. Type of Unit. Cement Evaporation Pit.

b. Location of Unit. See Figure C-15. The location of the chromic acid dump pit is on property leased by the Raytheon Corporation at Biggs Army Airfield. The pit is northwest of the Raytheon Building and adjacent to a long cement pad, which was the foundation for fuel tank valves.

c. Unit Description. The Raytheon Corporation used chromic acid in metal cleaning operations. The waste solution from this operation was dumped periodically into the concrete pit which was 2 feet deep by 18 inches wide by 20 feet long. Six long cracks in the pit walls were observed running below ground level allowing contents to leach into the surrounding soil. Spillage of the solution as it was being poured into the pit also caused some surface contamination. The Chromic acid pit and surrounding area was cleaned up by a private contractor. The clean up procedure meets EP Toxicity standard for chromium of less than 5 mg/L.

d. Dates of Operation. 1980-1983.

e. Waste Description. Chromic acid, hexavalent chromium.

f. Previous Environmental Monitoring. Preliminary scan samples were taken of the contents of the chromic acid evaporation pit and the surrounding soil surface to establish the presence and levels of contamination. Analyses performed by USAEHA laboratories in 1983 confirmed the presence of chromic acid in the soil adjacent to the pit. [The extract from a representative sample of soil contained 2,400-2,800+mg/L using the EPA EP Toxicity Test methods]. Analyses also confirmed high concentrations of hexavalent chromium (4,587 µg/g) within the pit. The contaminated area was completely defined at a later date after further sampling throughout the area by USAEHA personnel.

g. Known/Suspected Releases. As determined by sampling and analyses, the soil was contaminated with chromium to a maximum of 13,713 µg/g (Cr+6 to a level of 4,587 µg/g). A caliche layer located 6 to 7 inches below the soil surface stopped the vertical migration of contamination except where cracks developed in the evaporation pit walls below the caliche layer. The horizontal migration had been checked to the south and west by a sand ridge. In general, depth to the ground water at Fort Bliss ranges from approximately 225 feet to 315 feet below the land surface. Therefore, ground-water contamination by the chromium waste is not expected.

h. Status of Site. This site will be closed as a Texas Class I Hazardous Waste Site by FTBL in conjunction with the Texas Water Commission. Closure should be completed by November 1987.

i. Environmental Recommendations. Continue with closure of site in conjunction with the Texas Water Commission.

j. References. 1, 4, 7.

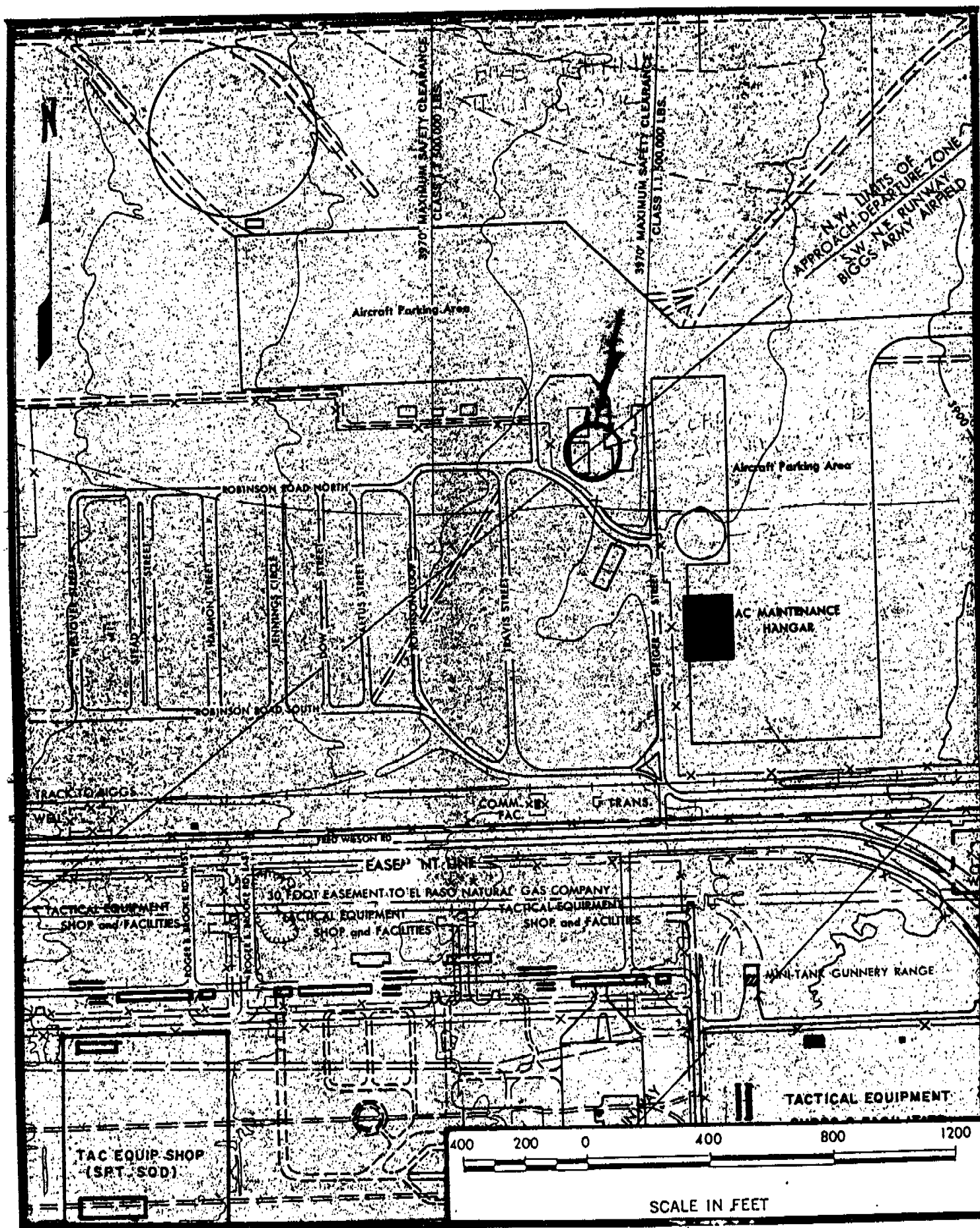


FIGURE C-15 RAYTHEON CHROMIC ACID PIT (FTBL-017)

18. UNIT NAME: FTBL-018, Biggs Army Airfield Fire Training Pit.

a. Type of Unit. Fire Training Pit

b. Location of Unit. See Figure C-15A.

c. Unit Description. The fire training area at Fort Bliss consists of approximately 8-10 burn sites within a 5-acre area near Biggs Army Airfield. During a September 1985 Hazardous Waste Special Study conducted by USAEHA, it was observed that each burn site had 55-gallon drums of waste material stored in the vicinity for use in training exercises. In addition, there was a large centralized storage area for drums at the site. At the time of the study, the training area was found to contain a total of 1,551 drums that potentially held at least 1 inch of material. One hundred sixty empty drums were also found.

d. Dates of Operation. 1980-1983.

e. Waste Description. The material within the drums and used for fire training purposes was generated on Fort Bliss and consisted of two basic categories of chemicals:

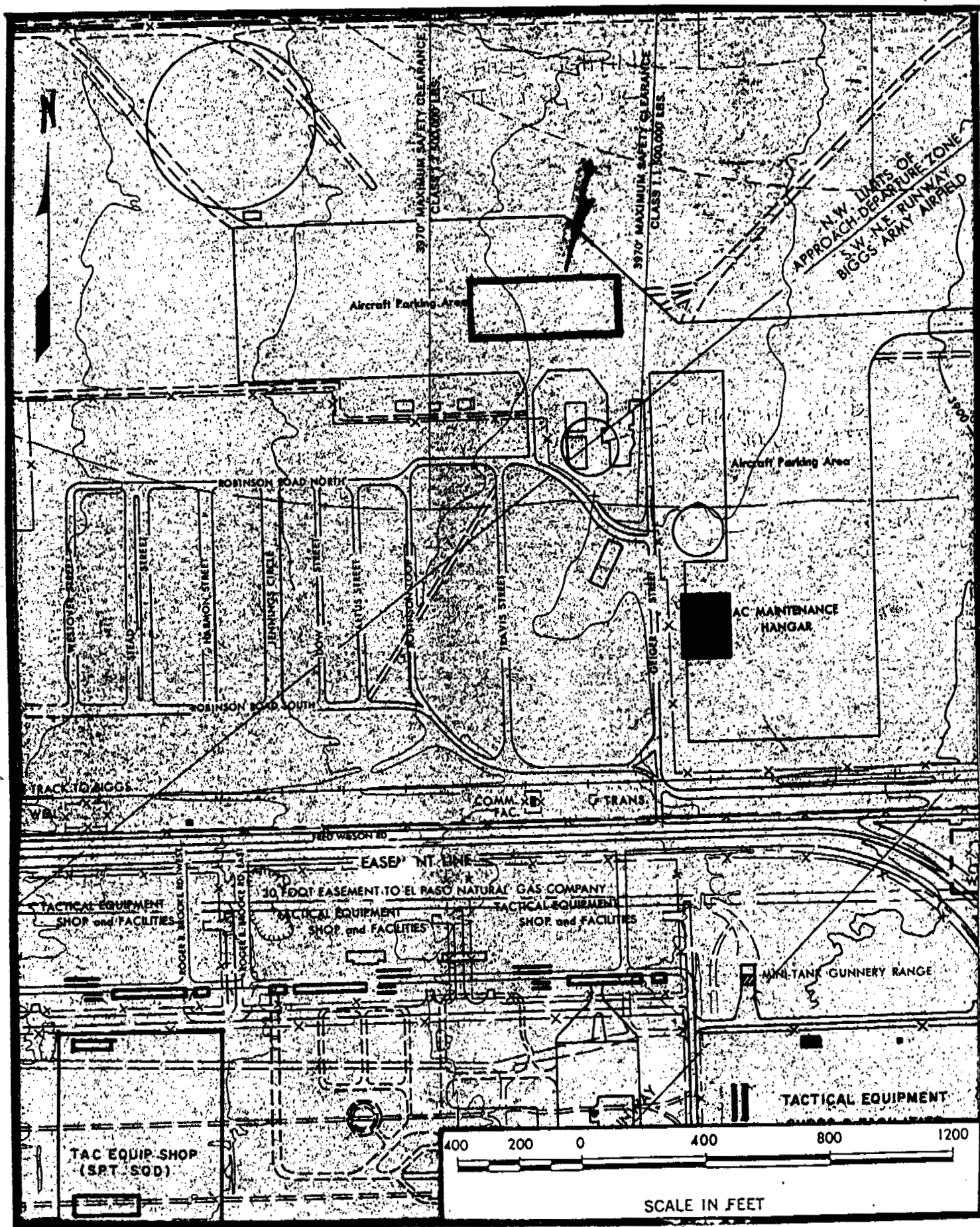
(1) Fuels, consisting of single components or mixtures of kerosene, diesel, gasoline, motor gasoline, aviation gasoline (AVGAS), jet fuel (JP-4), etc.

(2) Waste/Used Oil alone or in combination with maintenance shop/motor pool waste (i.e., hydraulic fluid, degreasing solvent, etc.), and the potential for a variety of other solvents generated on the installation.

f. Previous Environmental Monitoring. The study by USAEHA in September 1985 was conducted to identify the contents of the 1,551 55-gallon drums of waste material stored throughout the fire training area and to recommend disposal options for the material. Of the drums sampled, only 155 were found to contain greater than 1 inch of material. Of these, 12.2 percent contained small amounts of chlorinated solvents. Also during September, another sampling and analysis study was conducted by USAEHA to evaluate the existence and extent of soil contamination caused by the use of waste oils and fuels for fire training exercises.

g. Known/Suspected Releases. Past investigations have shown traces of various chlorinated hydrocarbons to be present in one particular burn area, the fuselage of a large aircraft. The results of the USAEHA soil study identified the presence of chlorinated hydrocarbons in three samples, although no firm conclusions could be made about the level or extent of contamination. It was, therefore, recommended in the Agency report that the site be resampled.





**FIGURE C-15A BIGGS ARMY AIRFIELD FIRE TRAINING PIT (FTBL-018)**

h. Status of Site. Closed by State authorities. Closure plan being finalized. The site is currently under investigation by a private contractor hired by the U.S. Army Corps of Engineers, Kansas City District. The results of this investigation will determine the extent of remedial actions. Drums of waste material are currently being disposed of under guidelines from the State of Texas. Final closure will be coordinated by the State of Texas Water Commission.

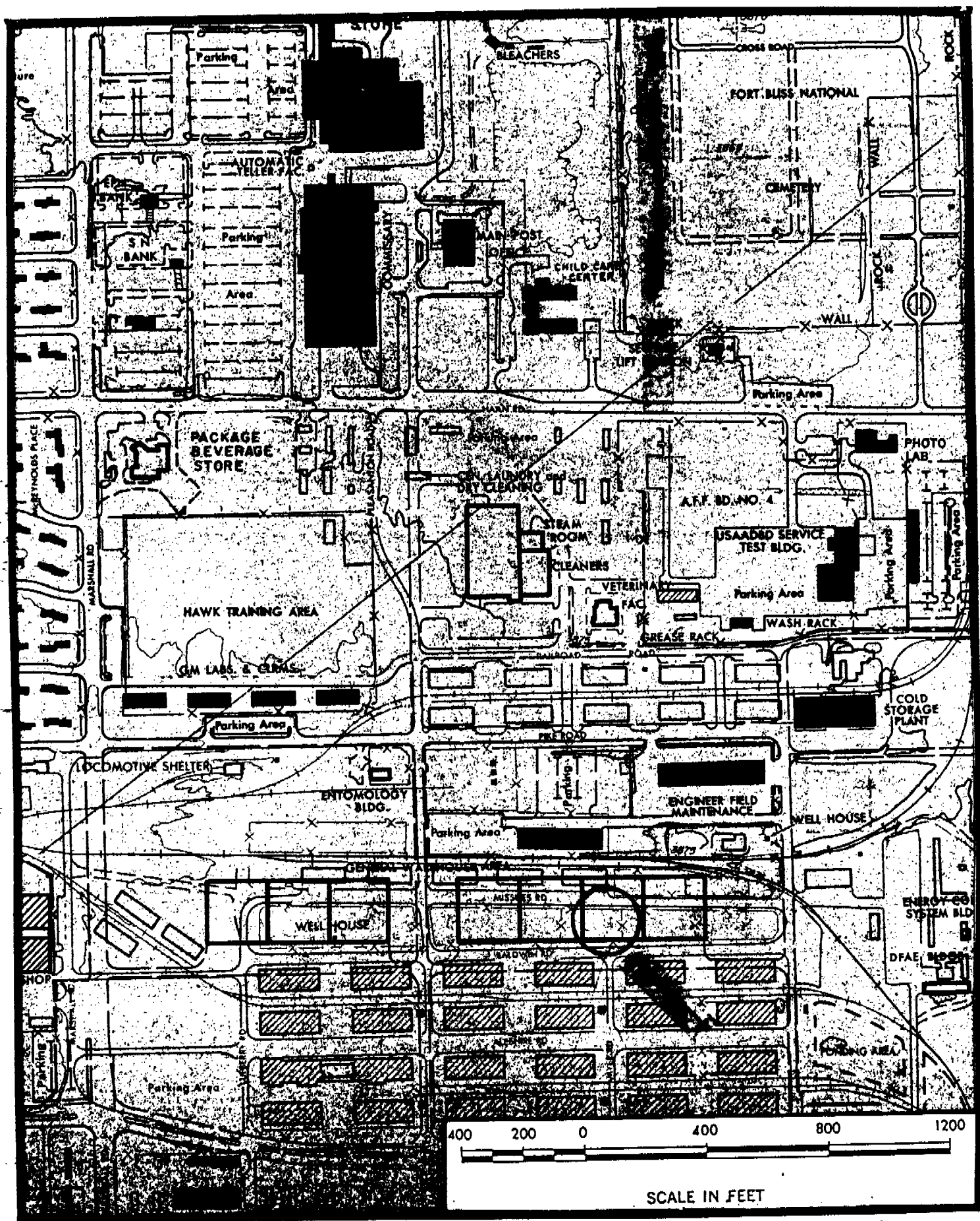
i. Environmental Recommendations. Continue with closure and drum disposal actions currently underway, and continue coordination with State of Texas Water Commission on these actions.

j. References. 1, 5, 6, 7, 9, 10.

19. UNIT NAME: FTBL-019, Pesticide Storage and Mixing Area, Butler Buildings 60-36 and 60-276.

- a. Type of Unit. Pesticide Storage and Mixing Area
- b. Location of Unit. See Figure C-16.
- c. Unit Description. Pesticide storage and mixing area, Buildings 60-36 and 60-276.
- d. Dates of Operation. 1982-1983.
- e. Waste Description. Chlordane, diazinon, malathion and DDT.
- f. Previous Environmental Monitoring. During a January 1983 Hazardous Waste Management Survey conducted by USAEHA, an ongoing spill problem was identified outside the pesticide mixing area. Soil surface samples taken at the time of the survey were analyzed by USAEHA and revealed concentrations of the waste pesticides mentioned above.
- g. Known/Suspected Releases. Soil contamination from waste pesticides is evident from the results of the sample analyses; however, the extent is not yet known. The highest level of pesticide found was 77.9 ppm of metabolized chlordane.
- h. Status of Site. Ongoing. No cleanup performed.
- i. Environmental Recommendations. Develop a soil sample and analysis plan to further identify the extent of contamination.
- j. Reference. 7.

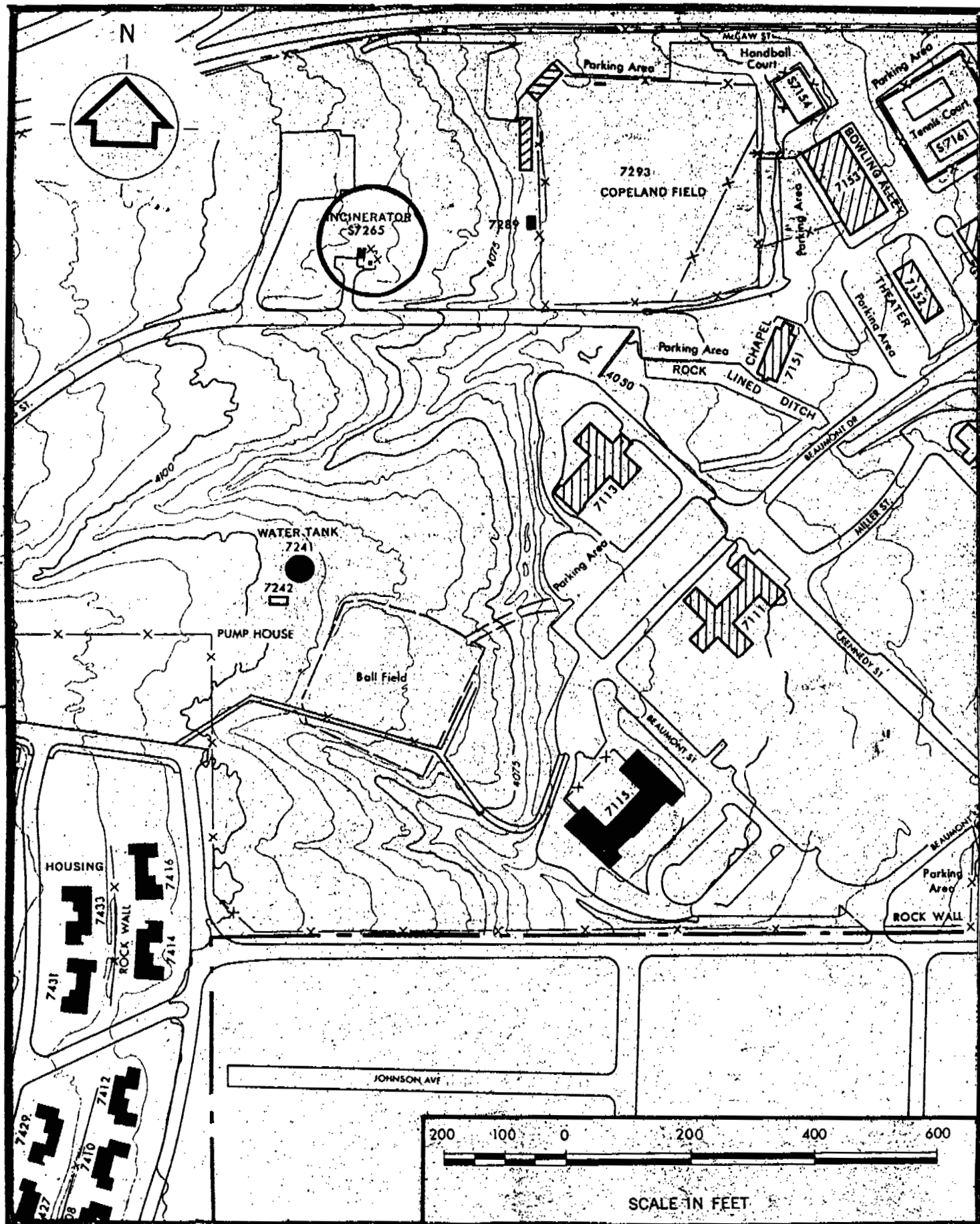




**FIGURE C-16 PESTICIDE STORAGE AND MIXING AREA (FTBL-019)  
OUTLER BLDGS. 60-36 AND 60-276**

20. UNIT NAME: FTBL-020, Pathological Incinerator.

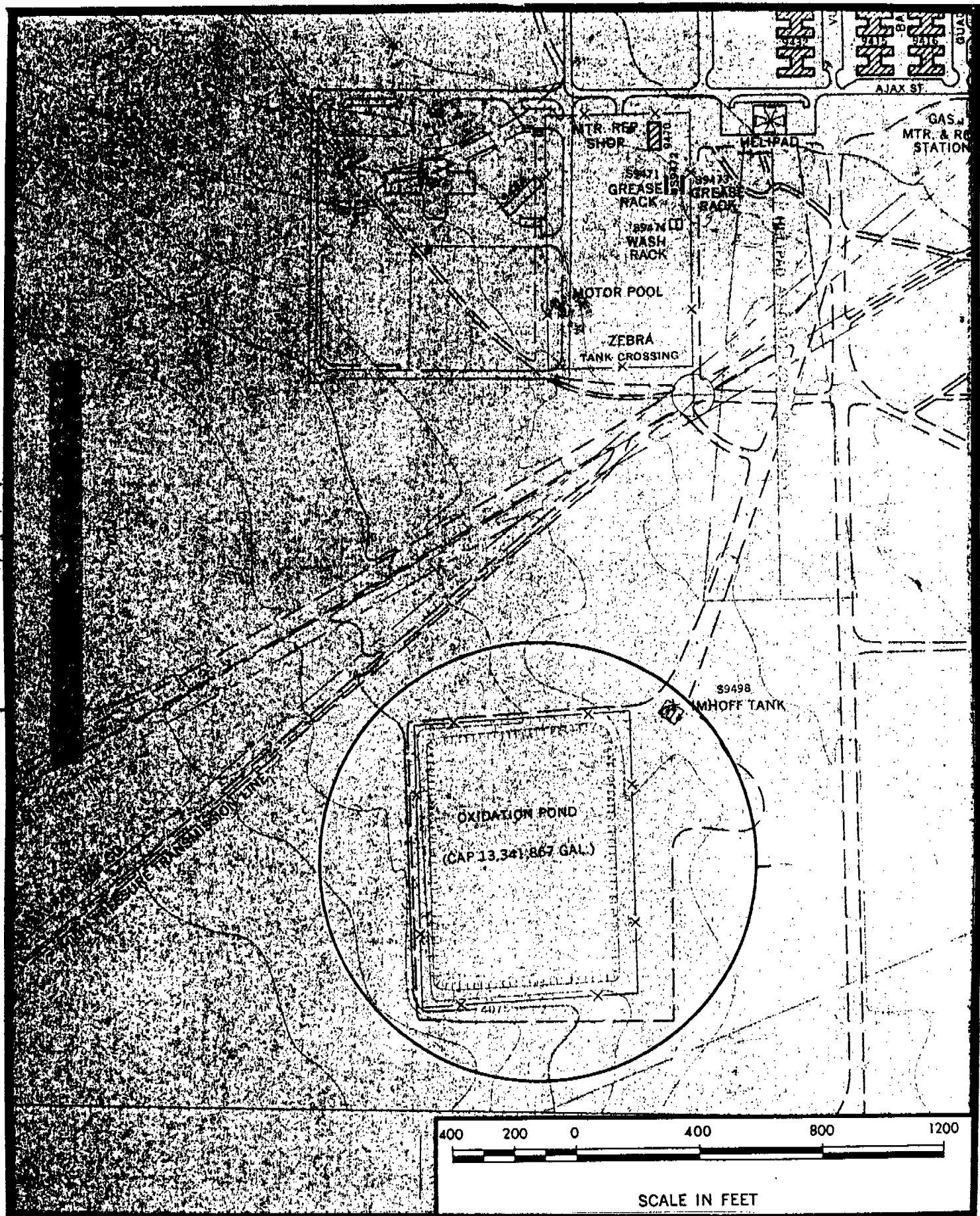
- a. Type of Unit. Pathological Incinerator.
- b. Location of Unit. See Figure C-17. Building S7265.
- c. Unit Description. Pathological, Natural Gas Incinerator. Volume of waste generated per day is approximately 20 lbs.
- d. Dates of Operation. 1986 - Ongoing.
- e. Waste Description. Animal carcasses and human limbs, (glass implements present during site visit). Infectious waste disposed of in Landfill No. 1.
- f. Previous Environmental Monitoring. Air monitoring: The incinerator was within Texas air quality standards for an opacity test, conducted during 1986.
- g. Known/Suspected Releases. Ash disposed of at sanitary landfill.
- h. Environmental Recommendations. None.
- i. Reference. 12.



**FIGURE C-17 PATHOLOGICAL INCINERATOR (FTBL-020)**

21. UNIT NAME: FTBL-021, McGregor Oxidation Lagoon.

- a. Type of Unit. Oxidation Lagoon.
- b. Location of Unit. See Figure C-18. McGregor Range.
- c. Unit Description. Domestic wastewater oxidation lagoon. Field investigation found liquid at a high level, covering the entire lagoon surface. Freeboard appeared to be several feet. The lagoon is reported to be lined.
- d. Dates of Operation. Unknown.
- e. Waste Description. Domestic wastewater.
- f. Previous Environmental Monitoring. None known.
- g. Known/Suspected Releases. None known.
- h. Environmental Recommendations. None.
- i. Reference. 12.



**FIGURE C-18 MC GREGOR OXIDATION LAGOON (FTBL-021)**

22. UNIT NAME: FTBL-022, OroGrande Oxidation Lagoon.

a. Type of Unit. Oxidation Lagoon.

b. Location of Unit. See Figure C-19. OroGrande Range Complex.

c. Unit Description. Domestic wastewater oxidation lagoon. Field investigation found the lagoon to have no standing water. The lagoon is reported to be lined. The lagoon is vegetated.

d. Dates of Operation. Unknown.

e. Waste Description. Domestic wastewater.

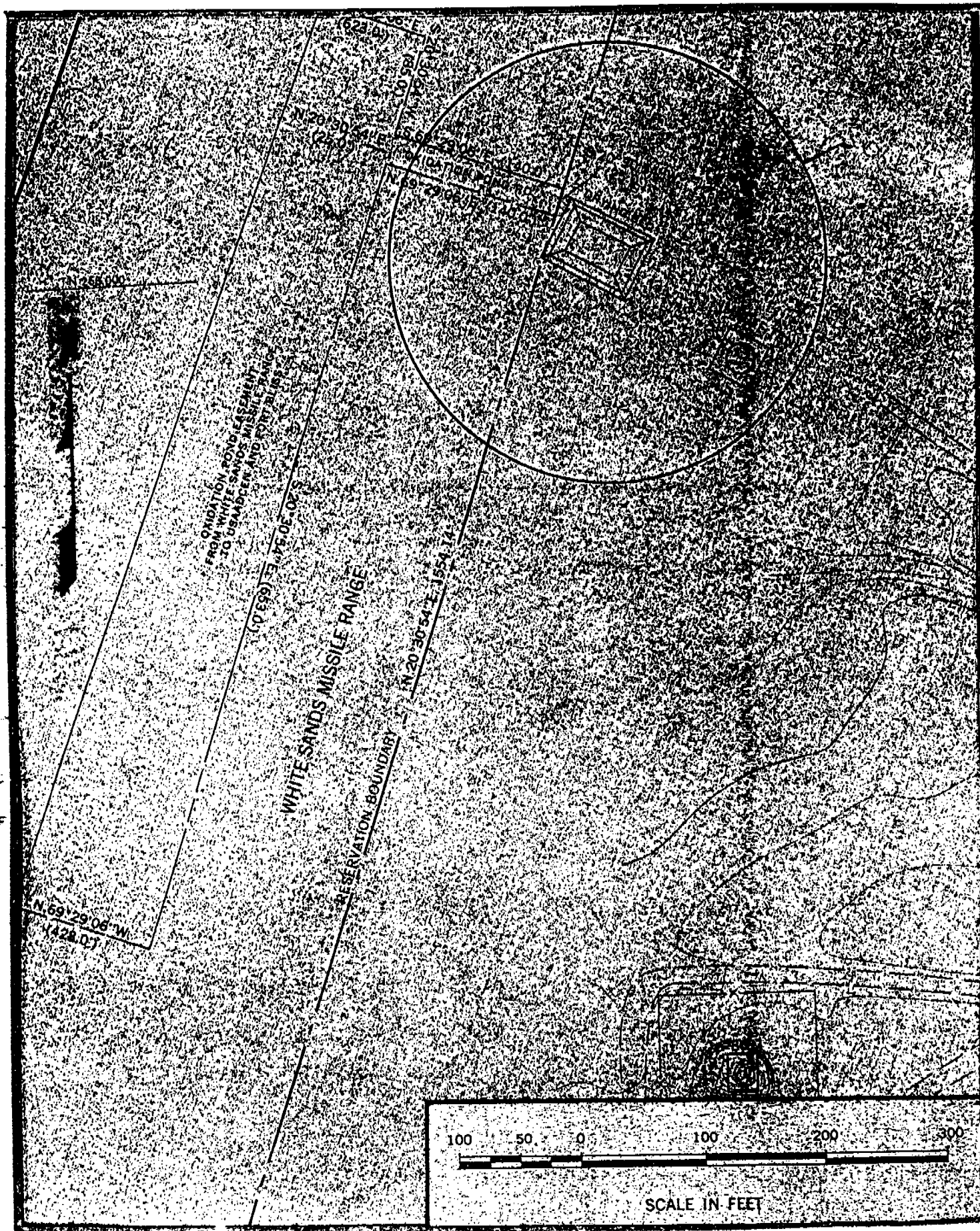
f. Previous Environmental Monitoring. None known.

g. Known/Suspected Releases. None known.

h. Environmental Recommendations. None.

i. Reference. 12.



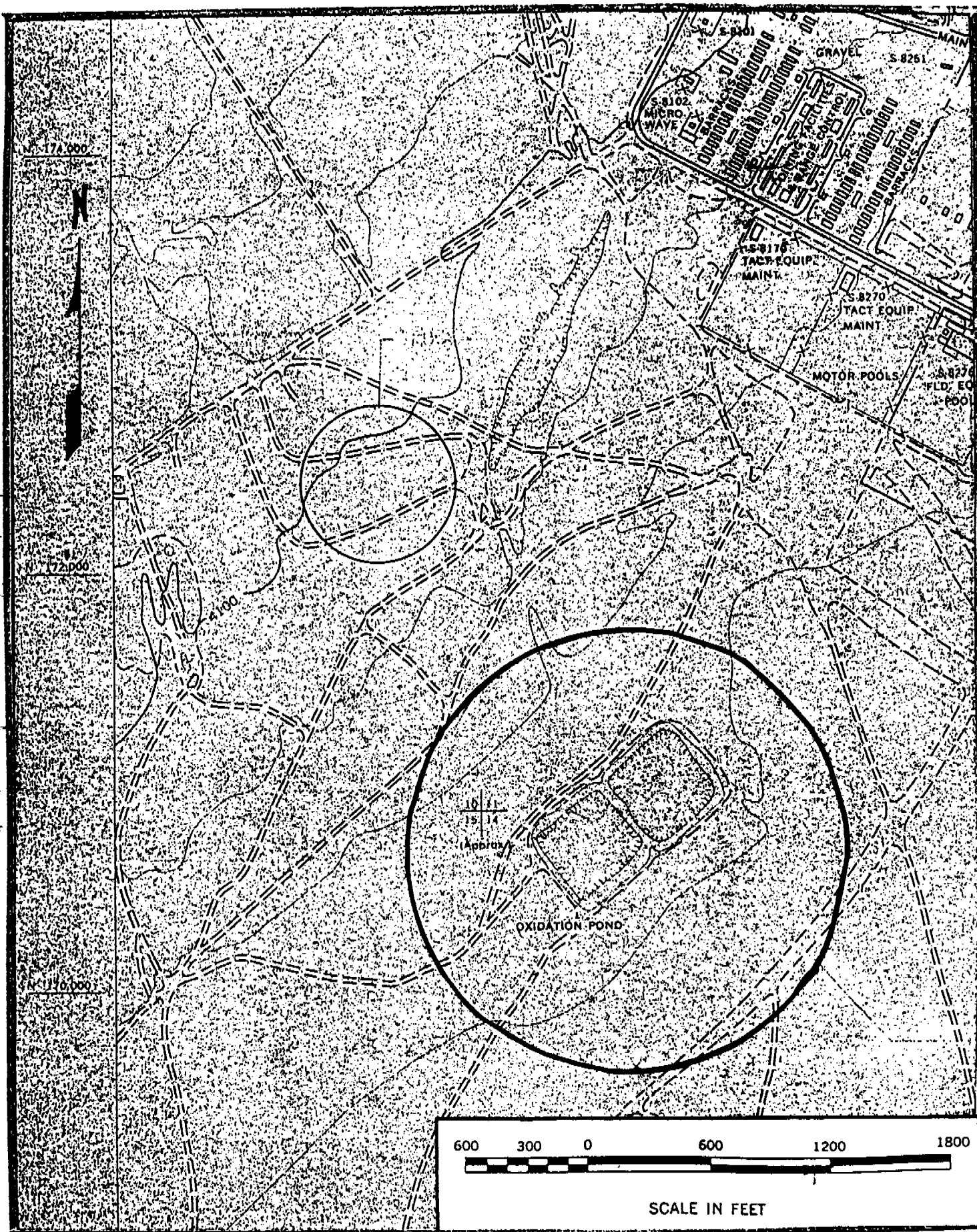


**FIGURE C-19 ORO GRANDE OXIDATION LAGOON (FTBL-022)**

23. UNIT NAME: FTBL-023, Dona Ana Oxidation Lagoon.

- a. Type of Unit. Oxidation Lagoon.
- b. Location of Unit. See Figure C-9A.
- c. Unit Description. Wastewater in center of lagoon. Site has two adjacent lagoons. The lagoons are reported to be unlined.
- d. Dates of Operation. Unknown.
- e. Waste Description. Domestic wastewater.
- f. Previous Environmental Monitoring. None known.
- g. Known/Suspected Releases. None known. The lagoons are unlined, therefore, a potential for ground water contamination exists.
- h. Environmental Recommendations. None.
- i. Reference. 12.

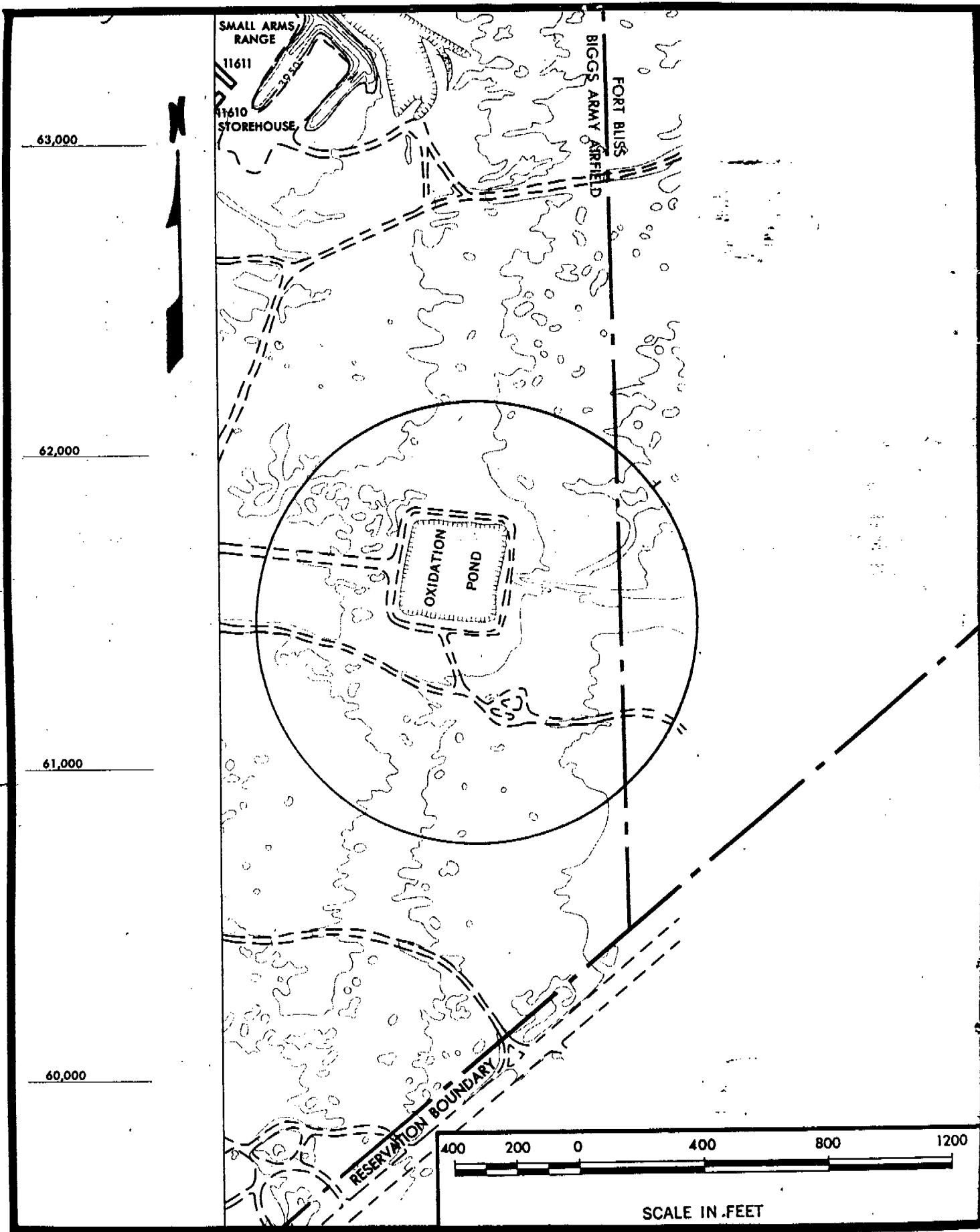




**FIGURE C- 9A DONA ANA OXIDATION LAGOON (FTBL-023)**

24. UNIT NAME: FTBL-024, Oxidation Lagoon (NCO Academy).

- a. Type of Unit. Oxidation Lagoon (spill).
- b. Location of Unit. See Figure C-20. This site is east of the disciplinary barracks servicing the NCO Academy.
- c. Unit Description. Three lagoons. One main and two overflow lagoons in line. The lagoons are unlined.
- d. Dates of Operation. 1960-Present.
- e. Waste Description. Primary lagoon: Domestic Wastewater. Second overflow lagoon: Waste from fuel tank purging is generated (2-gallon purging solution plus 5,000 gallons of water) three to four times per year.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. Five- to ten-thousand gallon spill of contaminated fuel. The lagoons are unlined, therefore a potential for ground water contamination exists.
- h. Environmental Recommendations. Sample soil to determine penetration depth of fuel spill and whether any hazardous constituents were contained in fuel. Following testing for depth of contamination and hazardous constituents, remedial actions should be coordinated with the State of Texas.
- i. Reference. 12.



**FIGURE C-20 NCO ACADEMY OXIDATION LAGOON (SPILL) (FTBL-024)**

25. UNIT NAME: FTBL-025, Hazardous Waste and PCB Storage Facility.

a. Type of Unit. Hazardous Waste and PCB Storage Facility.

b. Location of Unit. See Figure C-21. Building 11614, east of Biggs Airfield.

c. Unit Description. The facility includes a secure metal building on a bermed cement pad of approximately 20 feet X 40 feet, with a 6-inch curb. Outdoor PCB storage is on degraded asphalt and soil. Some PCB items are stored in boxes and metal drip pans.

d. Dates of Operation. 1982-Present.

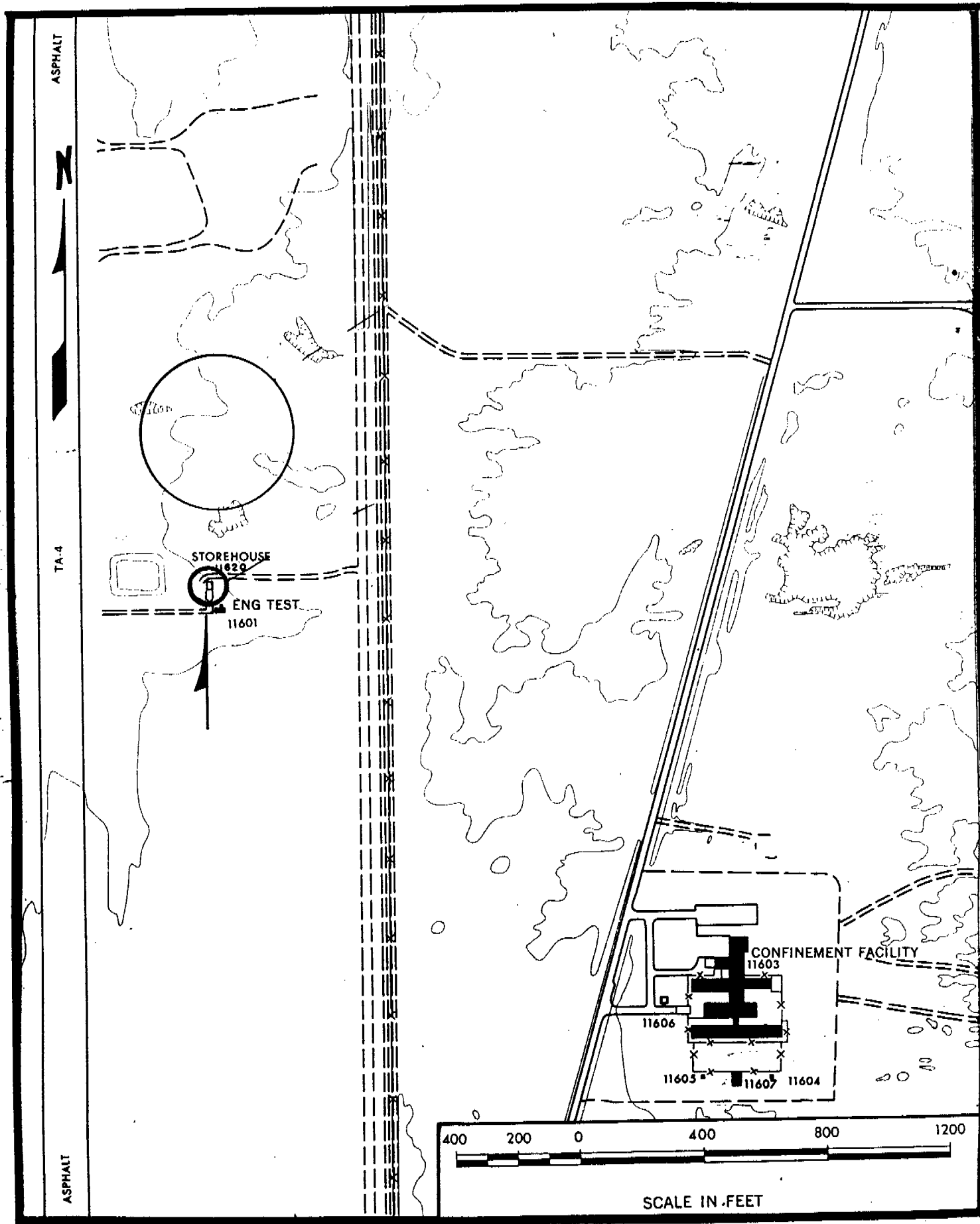
e. Waste Description. PCBs, chromic acid, corrosives, ignitables, toxics, and reactives.

f. Previous Environmental Monitoring. None known.

g. Known/Suspected Releases. There was evidence of leakage from the box containing PCB capacitors, and from non-PCB transformers. Two Leaking PCB capacitors were stored in a shallow metal drip pan on soil. Here there is the potential for environmental contamination.

h. Environmental Recommendations. Develop a sampling plan to determine the extent of PCB contamination adjacent to storage building. Remedial actions will depend on results of sample analysis and should be coordinated with the State of Texas. Store PCB transformers and capacitors in accordance with requirements set forth in 40 CFR 761.65.

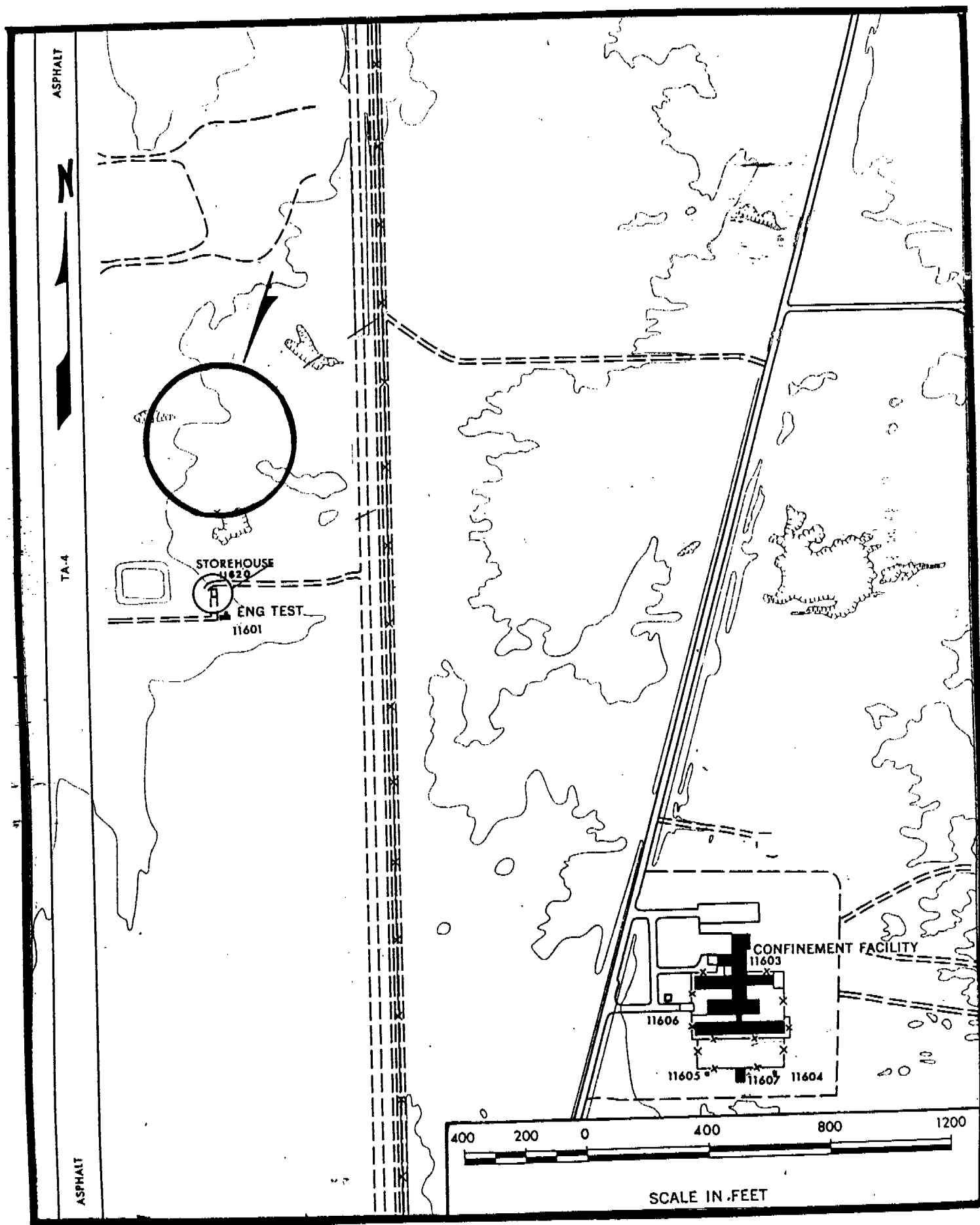
i. Reference. 12.



**FIGURE C-21 HAZARDOUS WASTE AND PCB STORAGE FACILITY (FTBL-025)**

26. UNIT NAME: FTBL-026, Raytheon Hazardous Waste Storage Facility.

- a. Type of Unit. Hazardous Waste Storage Facility.
- b. Location of Unit. See Figure C-15B.
- c. Unit Description. This storage facility has two covered and bermed concrete pads surrounded by a chain link fence. The pads are of epoxy-sealed concrete and have a 6-inch berm.
- d. Dates of Operation. 1985-Present.
- e. Waste Description. Hazardous wastes including ignitables, toxics, and corrosives.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None.
- h. Environmental Recommendations. None.
- i. Reference. 12.



**FIGURE C-23 FIRE TRAINING AREA (OLD) (FTBL-028)**

APPENDIX D  
EXAMPLE LETTER

(Office Symbol)

Federal Facilities Coordinator  
U.S. Environmental Protection Agency  
Regional Office, Region VI  
1445 Ross Avenue  
Dallas, TX 75202-2733

SUBJECT: Identification and Evaluation of Solid Waste Management Units at  
Fort Bliss, Texas

1. The U.S. Army Environmental Hygiene Agency (USAEHA) conducted a Solid Waste Management Unit (SWMU) Evaluation for Fort Bliss (FTBL). The enclosed document is a draft study accomplished by USAEHA for the U.S. Army Training and Doctrine Command. The document is for review by the U.S. Environmental Protection Agency (EPA) as the preliminary step in conducting a RCRA Facility Assessment, specified under the 1984 Hazardous and Solid Waste Amendments §Section 3004(u)é.

2. The purpose of the enclosed draft document was to identify, describe and evaluate all SWMU's on FTBL and to delineate those units requiring further sampling, investigation or corrective action. The SWMU evaluation provides detailed information concerning each SWMU on FTBL and will greatly assist the EPA in preparation for their Visual Site Inspection at FTBL.

3. The FTBL requests the Federal Facilities Coordinator at EPA have the appropriate EPA personnel peruse the enclosed draft document. In addition, please contact the FTBL environmental coordinator within 30 days to make arrangements for a site visit to inspect the SWMU's. One goal of the visit will be to discuss with FTBL and USAEHA personnel those SWMU's requiring further investigation and to define the general environmental tasks of that investigation and to define the general environmental tasks of that investigation.

4. The Environmental Coordinator at FTBL is Mr.XXXXX. Mr.XXXXX may be contacted at (XXX) XXX-XXXX.

Encl

(SIGNATURE BLOCK)



APPENDIX E

REFERENCES

1. Title 40, CFR, 1987 rev, Part 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
2. Installation Assessment of the Headquarters, U.S. Army Air Defense Center and Fort Bliss, Texas, Report No. 335, Environmental Science and Engineering, Inc., Gainesville, FL., 32602, prepared for U.S. Army Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, MD 21010-5401, October 1983.
3. Letter, USAEHA, HSE-ES/WP, 29 June 1976, subject: Solid Waste General Survey No. 26-014-76, Fort Bliss, Fort Bliss, Texas, 2-6 February 1976.
4. Title 40, CFR, 1987 rev, Part 265, Interim Status Standards for Owners and Operators of Hazardous Waste Treatment Storage and Disposal Facilities.
5. Letter, USAEHA, HSHB-ES-E/WP, 11 April 1984, subject: Hazardous Waste Management Consultation No. 37-26-0349-84, Soil Contaminated with Chromic Acid, Fort Bliss, Texas, 15-19 August 1983.
6. Letter, USAEHA, HSHB-ME-SH, 8 September 1986, subject: Hazardous Waste Special Study No. 37-26-0588-86, Identification of Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas, 15-18 September 1985.
7. Letter, USAEHA, HSHB-ME-S, 30 July 1986, subject: Hazardous Waste Study No. 37-26-0538-36, Fire Training Pit, Fort Bliss, El Paso Texas, 11-22 September 1985.
8. Letter, USAEHA, HSHB-ES-E/WP, 28 July 1984, subject: Hazardous Waste Management Survey No. 37-26-0277-84, Fort Bliss, Texas, 17-28 January, 13-17 March, and 14-18 August 1983.
9. Title 40, CFR, 1987 rev, Part 261, Identification and Listing of Hazardous Waste.
10. Letter, USAEHA, HSHB-ES-E, 12 November 1985, subject: Preliminary Report, Hazardous Waste Study No. 37-26-0538-86, Fire Training Pit, Fort Bliss, El Paso, Texas, 11-22 September 1985.
11. Letter, USAEHA, HSE-MW, 4 May 1987, subject: Soil Analysis from Fort Bliss Sanitary Landfill, No. 38-66-0190-79.
12. R. Nickolas Jr., Environmental Engineer, DMO, DEH, Fort Bliss, TX.

Interim Final Rpt, Hazardous Waste Consultation No. 37-26-1647-88, 3-7 Aug 87

13. Title 40, CFR, 1987 rev, Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.
14. Title 40, CFR 1987 rev, Part 257, Criteria for Classification of Solid Waste Disposal Facilities and Practices.
15. Title 40, CFR, 1987 rev, Part 260, Hazardous Waste Management System: General.
16. Title 40, CFR, 1987 rev, Part 270, EPA Administered Permit Programs: The Hazardous Waste Permit Program.
17. Fort Bliss, Texas Terrain Analysis, September 1978, US Army Engineer Topographic Laboratories, Fort Belvoir, Virginia.
18. Promulgated Rules, Hazardous Waste Management System; Proposed Codification of Statutory Provisions, 51 Federal Register (FR) 10722, 1 December 1987.
19. AR 40-5, 30 August 1986, Preventive Medicine.

E-2

E-2

1. Keywords

GROUNDWATER 0101  
GROUNDWATER POLLUTION  
SOIL  
SOLID WASTE MANAGEMENT UNITS

2. Start Date: FY 89 Quarter 4  
End Date: FY 90 Quarter 2

3. HQ Division: 26 - WASTE DISPOSAL ENGINEERING DIV

4. Phase:

5. Program NO: 38

6. Survey Type: GD - SOLID WASTE DISPOSAL STUDY

7. INSTALLATION OR SOURCE OF INFORMATION (CITY & STATE OR  
COUNTY ARE ESSENTIAL)  
TC - USA TRAINING & DOCTRINE COMMAND

8. Authors:

9. ARLOC/Activity: 48083 000 - FORT BLISS  
Location: FORT BLISS  
State: TX

10. Project Control Number: 26-1647-90

11. Title: EVAL.-SOLID WASTE MGMT UNITS

12. DSA: 66

*Reg File*  
*11/90*

*JD0043*



**A  
E  
H  
A**

**UNITED STATES ARMY  
ENVIRONMENTAL HYGIENE  
AGENCY**

**ABERDEEN PROVING GROUND, MD 21010-5422**

**FINAL REPORT  
HAZARDOUS WASTE CONSULTATION NO. 38-26-1647-90  
EVALUATION OF SOLID WASTE MANAGEMENT UNITS  
FORT BLISS, TEXAS  
3-7 AUGUST 1987 AND 26-29 SEPTEMBER 1989**

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Command, ATTN: ATMD, Fort Monroe, VA 23651-5451.**

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disclosure of contents or reconstruction of the document.**



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY  
ABERDEEN PROVING GROUND, MARYLAND 21010-5422



17 JAN 1990

HS HB-ME-SE (40)

MEMORANDUM FOR Commander, USA Training and Doctrine Command,  
ATTN: ATMD, Fort Monroe, VA 23651-5451

SUBJECT: Final Report, Hazardous Waste Consultation  
No. 38-26-1647-90, Evaluation of Solid Waste Management Units,  
Fort Bliss, Texas, 3-7 August 1987 and 26-29 September 1989

EXECUTIVE SUMMARY


The purpose and a summary of the recommendations of the enclosed report follow:

a. Purpose. The U.S. Army Training and Doctrine Command requested the assistance of the U.S. Army Environmental Hygiene Agency to evaluate solid waste management units (SWMUs) present at Fort Bliss. The information generated from this survey will aid the installation in identifying those units which require environmental sampling and/or remedial action for compliance with Title 40, Code of Federal Regulations, Section 264.101, Corrective Action for Solid Waste Management Units.

b. Recommendations. To ensure regulatory compliance, we recommend the following: Implement environmental investigations at SWMUs FTBL-1, FTBL-3, FTBL-4, FTBL-30, FTBL-31, FTBL-39, FTBL-45, FTBL-50, and FTBL-63.

FOR THE COMMANDER:

Encl

  
PAUL R. THIES  
LTC, MS  
Chief, Waste Disposal  
Engineering Division

CF:

HQDA(ENVR-E) (w/encl)  
DA, USAEHSC, ATTN: CEHSC-F (w/encl)  
HQDA(SGPS-PSP) (wo/encl)  
Cdr, HSC, ATTN: HSCL-P (w/encl)  
Cdr, TRADOC, ATTN: ATEN (5 cy) (w/encl)  
Cdr, WBAMC, ATTN: PVNTMED Svc (2 cy) (w/encl)  
Cdr, USATHAMA, ATTN: CETHA-TE-E (w/encl)  
Cdr, USATHAMA, ATTN: CETHA-RM(TIC) (2 cy) (w/encl)  
Cdr, USAEHA-W (w/encl)

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REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY  
ABERDEEN PROVING GROUND, MARYLAND 21010-6422



HSHB-ME-SE

FINAL REPORT  
HAZARDOUS WASTE CONSULTATION NO. 38-26-1647-90  
EVALUATION OF SOLID WASTE MANAGEMENT UNITS  
FORT BLISS, TEXAS  
3-7 AUGUST 1987 AND 26-29 SEPTEMBER 1989

1. REFERENCES. See Appendix A for references cited in text and sources used for detailed descriptions of solid waste management units (SWMUs) in Appendix C.
2. AUTHORITY. Letter, HQ TRADOC, ATMD, 25 June 1986, subject: FY 87 Field Service Requirements.
3. PURPOSE. To evaluate SWMUs at Fort Bliss (FTBL), and to identify those units requiring environmental sampling or remedial action.

4. GENERAL.

a. Personnel Contacted. Appendix B provides a list of personnel contacted during this study.

b. U.S. Army Environmental Hygiene Agency (USAEHA) Study Personnel. Mr. Wayne L. Hardcastle, Environmental Scientist and Jack M. Heller, Ph.D., Environmental Scientist, Waste Disposal Engineering Division, performed the initial field work in August 1987 and wrote the Interim Final Report. Mr. Wayne A. Fox, Geologist, conducted the final site visit in September 1989. Mr. Fox was involved in negotiations with the U.S. Environmental Protection Agency (EPA) and the Texas Water Commission and wrote this Final Report.

c. Background.

(1) Hazardous waste (HW) treatment, storage, or disposal facilities seeking a permit after 8 November 1984, under Section 3004(u) of the Resource Conservation and Recovery Act (RCRA) [as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984], are required to address corrective action for all releases of HW or HW constituents from any SWMU. This includes inactive units at the facility, regardless of the time at which waste entered the unit. The codification for this statutory requirement is 40 CFR 264.101(b). To implement the provisions of section 3004(u), the owner/operator of any facility seeking a permit to be issued after 8 November 1984 must submit with the permit

application sufficient information to enable EPA to assess the applicability of this section to the owner/operator's facility. The EPA is not authorized to issue a permit without a determination that the facility is in compliance with section 3004(u).

(2) Information on the SWMUs has been documented in two reports; the Interim Final of this report (reference 19) prepared for the U.S. Army and the RCRA Facility Assessment PR/VSI Report (reference 20), prepared for the EPA, Region VI. This Final Report will provide complete information for all identified SWMUs from both references and will present preliminary corrective actions discussed in the meeting (29 September 1989) with EPA and State of Texas personnel (reference 21).

(3) Fort Bliss is presently in the process of preparing a Part B permit application for an HW container storage facility. The issued Part B permit will officially define RCRA corrective action for the SWMUs.

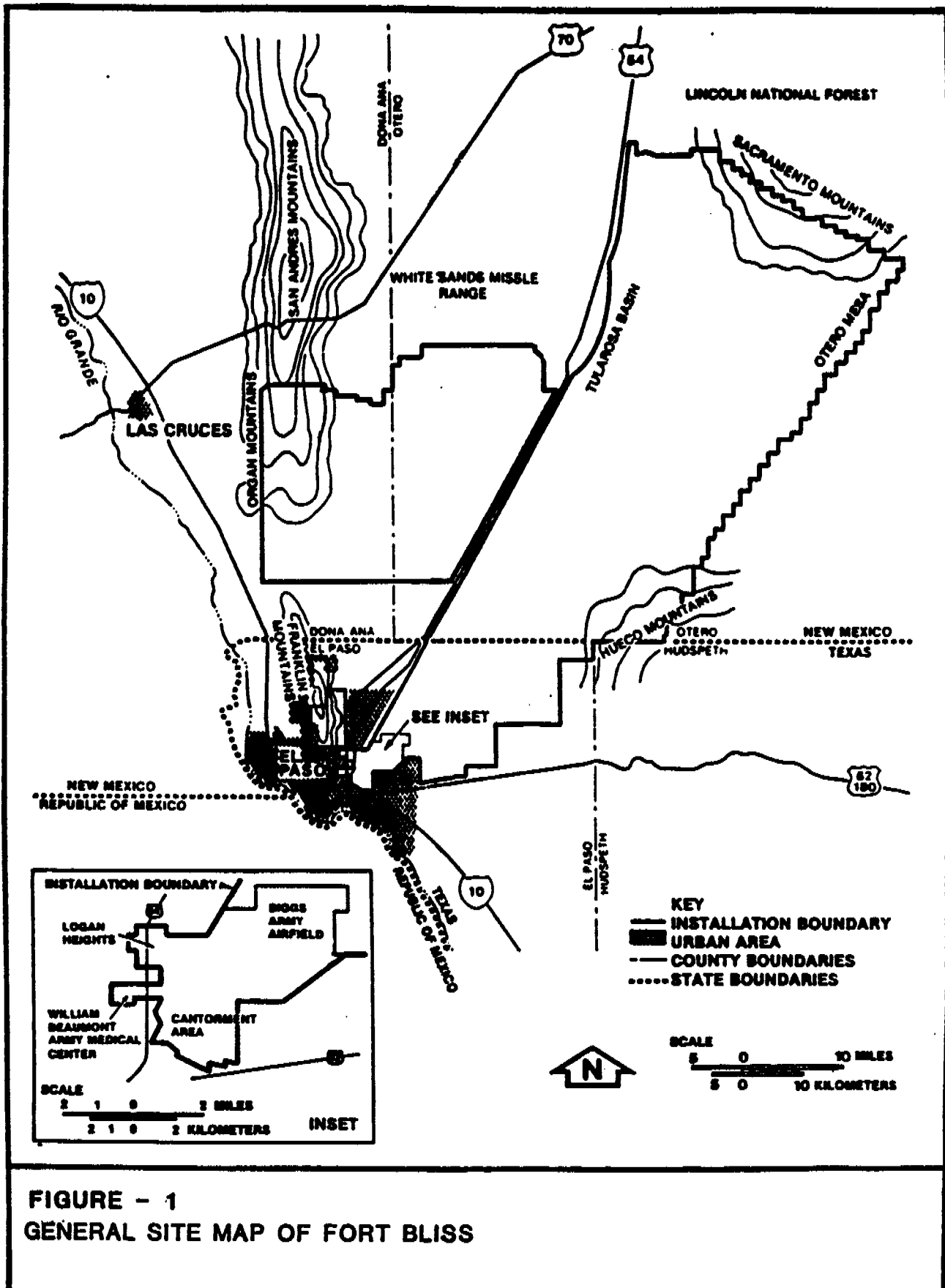
d. Methodology. Several enabling documents provide the foundation for the information gathered and the subsequent development of this survey. These documents included the RCRA Facility Assessment Guide and the EPA National RCRA Corrective Strategy document. By the use of these documents and site visits, those activities classified as SWMUs were identified and evaluated for potential corrective action.

e. Geographical Setting.

(1) Fort Bliss occupies a portion of the Basin and Range physiographic province in the far western corner of the State of Texas and in south-central New Mexico. The installation comprises an area of 1.2 million acres of which 89 percent is in New Mexico. The remaining 11 percent and main cantonment area are in northern El Paso County, Texas (Figure 1).

(2) The reservation encompasses four major topographic zones; however, the majority of acreage occupies the Tularosa Basin, a broad, semiarid valley situated between mountain ranges. Surrounding the Tularosa Basin and extending north and east of El Paso are sections of the Franklin Mountains to the west, Organ Mountains in the northwest, Hueco Mountains in the central area, and the Sacramento Mountains in the northeast. Maximum elevations are 1,727 meters above mean sea level (MSL) in the Hueco Mountains and up to 2,606 meters above MSL in the Organ Mountains. Valley elevations range from approximately 1,273 meters in the east to 1,197 meters in the west.





f. Geohydrology.

(1) Physiography. Most of Fort Bliss is within the nearly level to gently rolling Tularosa Basin. The basin consists of shallow ephemeral lake beds, alluvial plains, and low sand dunes. Surrounding the basin, extending north to south and tilted away from the basin, are isolated granitic intrusions and/or outcrops of limestone and dolostone. Extending from the mountains are escarpments and coalesced alluvial fans with gentle to moderate slopes (references 8 and 16).

(2) Structural Geology and Seismic Activity.

(a) Uplifting, characterized by high angle thrust faulting of areas to the east and west of the Tularosa Basin, accompanied by down-dropping of the basin (Tertiary period), produced the present mountain ranges. These uplifted block mountains are tilted away from the basin with beds dipping approximately 10 degrees. The basin has subsequently filled with unconsolidated sediments (late Tertiary and Quaternary) washed down from the surrounding mountains.

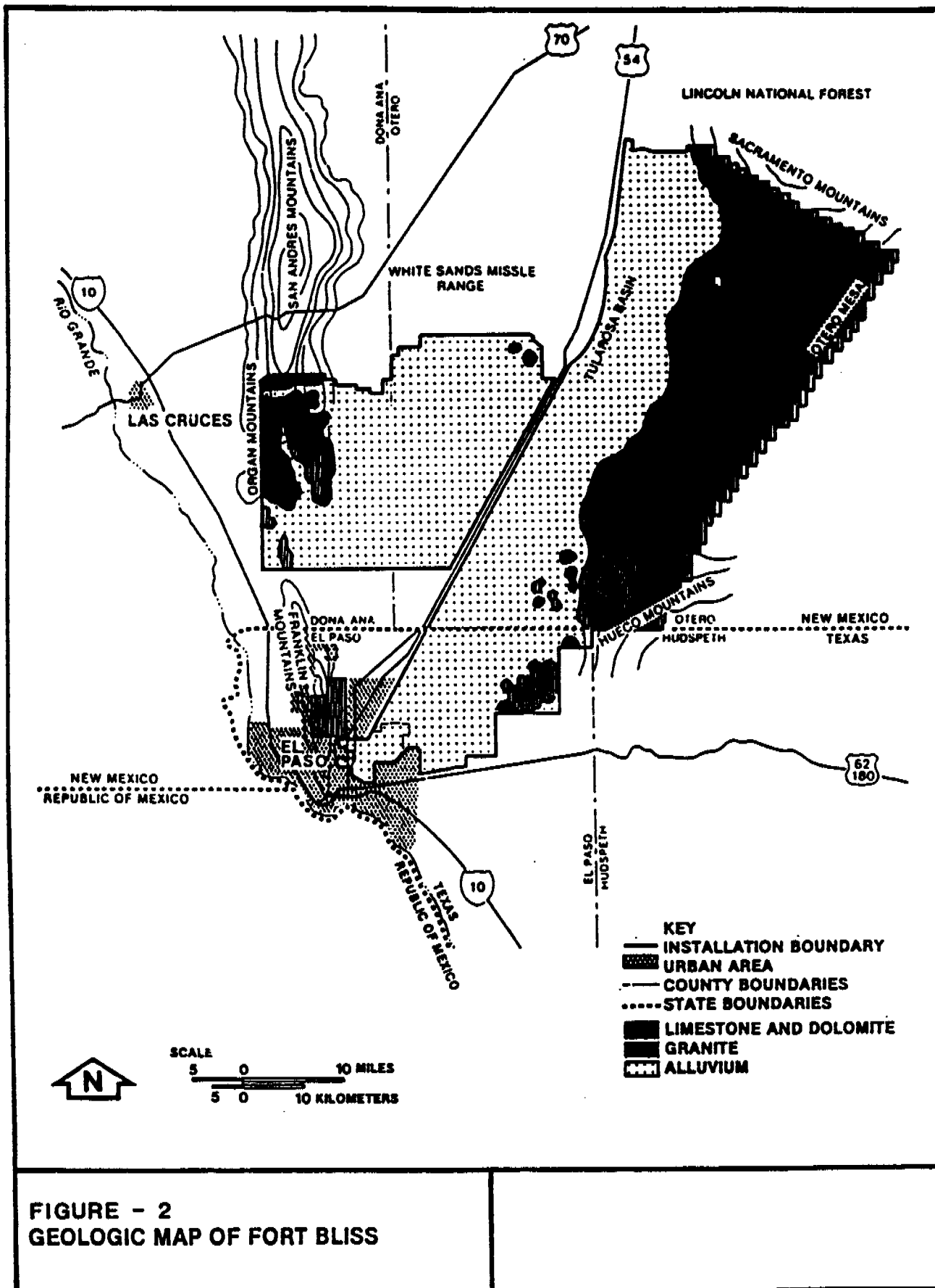
(b) Fort Bliss is in seismic risk zone I, the "Minor Risk of Damage" category. Earthquakes felt on the reservation in recent times have not been reported to have caused any significant damage (reference 16). Figures 2 and 3 provide additional information on geologic structure.

(3) Stratigraphy. The stratigraphy underlying the Tularosa Basin includes Quaternary unconsolidated alluvial deposits composed of sands, gravels, and caliche ranging from 0 to 9,000 feet (Figure 3). The alluvium contacts the Hueco limestone formation to the east and a Precambrian granite formation to the west (Figure 3). Gravels and boulders mixed with sand and silts grading to finer-grained deposits in lower basin areas characterize mountain and escarpment faces.

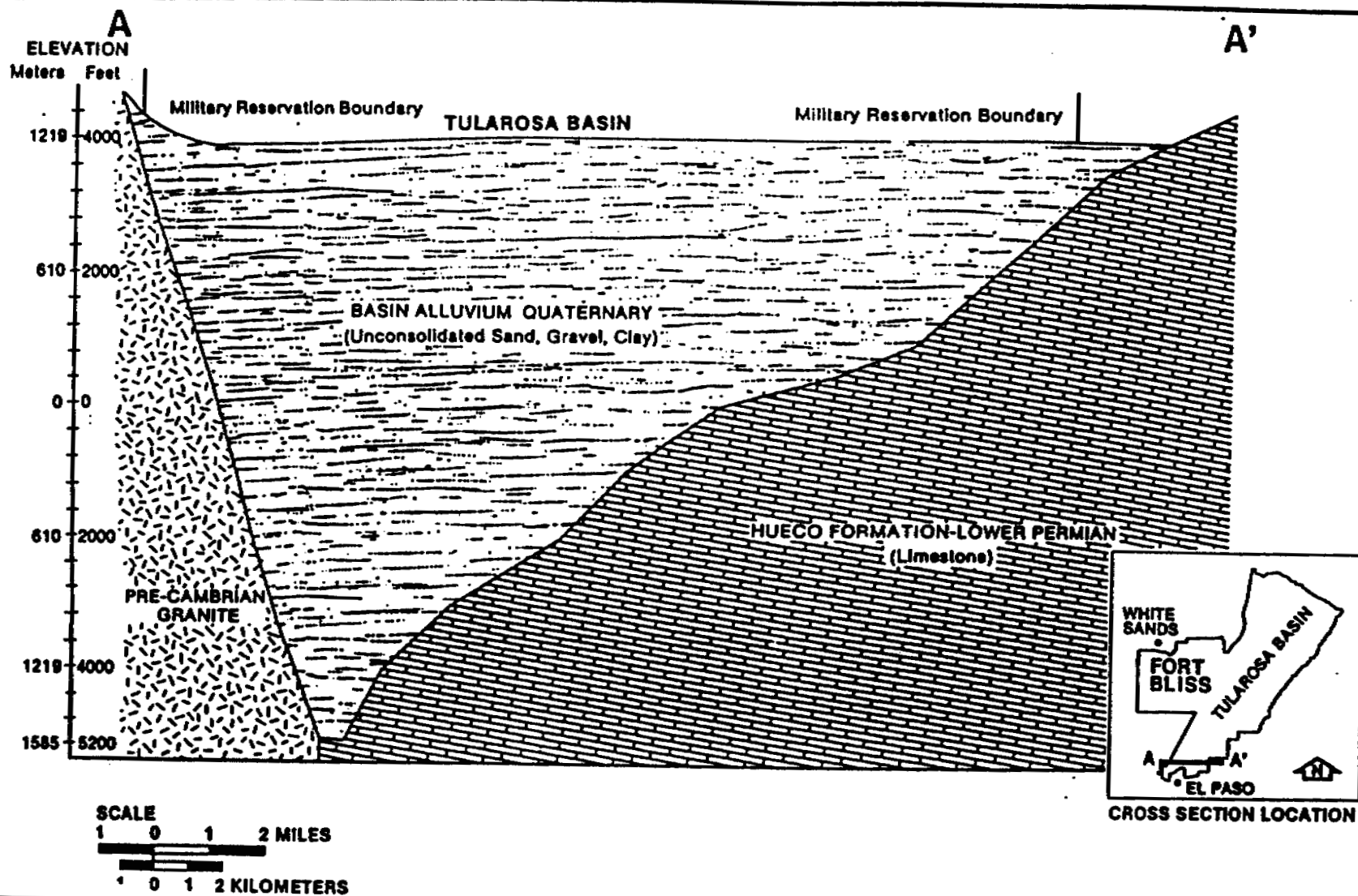
(4) Surface Hydrology. There are no natural perennial bodies of surface water on the FTBL reservation. Average annual rainfall is 8 inches per year, and the evapotranspiration rate is 110 inches (net loss of 102 inches). The combined depth to ground water, low precipitation, high evapotranspiration rate, and soils of poor permeability render infiltration to a minimum, except in areas of fracturing.

(5) Ground Water.

(a) The Hueco Bolson aquifer, situated in the unconsolidated deposits overlying bedrock holds ground water beneath FTBL. This aquifer is in the wedge shaped Quaternary alluvium sands and gravels and is not directly associated with the adjacent Hueco



**FIGURE - 2**  
**GEOLOGIC MAP OF FORT BLISS**



**FIGURE - 3**  
**GEOLOGIC CROSS SECTION THROUGH FORT BLISS**

limestone formation. Water from the Hueco Bolson formation is predominantly brackish; however, a fresh potable lense exists in its upper portion. Except near the gravely alluvial fans in higher elevations, very little recharge occurs due to the near impermeable crusty caliche. Therefore, the aquifer is generally regarded as semiconfined. As a consequence of excessive pumping and limited recharge, fresh water elevations are rapidly declining. Depth to water ranges from 255 to 345 feet below the land surface.

(b) Twelve active water supply wells provide FTBL with 75 percent of its fresh water. Fort Bliss purchases the balance of its potable water needs from the municipality of El Paso.

## 5. FINDINGS AND DISCUSSION.

a. General. Appendix C describes all SWMUs at FTBL based on information from references 19 and 20. Each SWMU description includes the type, size, description of activities, and wastes of each unit. Table 1 is a listing of the SWMUs by name and type. The location of each SWMU is shown on Figures 4 through 9.

b. Hazardous Constituent Releases. Table 2 is a list of SWMUs which have or may have released hazardous constituents to the environment. These sites, which have been selected by the EPA and the State of Texas (reference 21), require further work to determine if a threat to human health or the environment exists. The preliminary definition of environmental investigations to be accomplished at these sites is provided in Table 2.

TABLE 1. SOLID WASTE MANAGEMENT UNITS, FORT BLISS, TEXAS

<u>SWMU Site Number</u>	<u>Name of Unit</u>	<u>Figure No.</u>
FTBL-1	Landfill No. 1	5
FTBL-2	Rubble Pit No. 1	5
FTBL-3	Landfill No. 2	5
FTBL-4	Oil Pits Near Landfill No. 2	5
FTBL-5	Rubble Pit No. 2	5
FTBL-6	Landfill No. 3	5
FTBL-7	Landfill No. 4A	5
FTBL-8	Landfill No. 4B	5
FTBL-9	Landfill No. 5	5
FTBL-10	Landfill No. 6	-
FTBL-11	Landfill No. 7	5
FTBL-12	Landfill No. 8	5
FTBL-13	Landfill No. 9	5
FTBL-14	Landfill No. 10	-
FTBL-15	Rubble Dump - Biggs Army Airfield	5
FTBL-16	Rubble Dump - Spill Site	5
FTBL-17	EOD Open Demolition Area	7
FTBL-18	Landfill No. 13 - McGregor Range Rubble Pit	7
FTBL-19	McGregor Oxidation Lagoon	7
FTBL-20	Inactive Open Detonation Area	7
FTBL-21	Inactive Fire Training Area	7
FTBL-22	Waste Drum Storage Area	7
FTBL-23	Wash Rack Sump - Patriot Dept. Motor Pool	7

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SWMU Site Number	Name of Unit	Figure No.
FTBL-24	Oil/Water Separator - Patriot Dept. Motor Pool	7
FTBL-25	Landfill No. 14, Orogrande Rubble Pit	8
FTBL-26	Dona Ana Detonation Area -Range 41	9
FTBL-27	Landfill No. 12, Dona Ana Rubble Pit	9
FTBL-28	Motor Pool Waste Accumulation Area - Dona Ana	9
FTBL-29	Landfill No. 11	-
FTBL-30*	Hazardous Waste and PCB Storage Facility - Building 11614	5
FTBL-31	Fire Fighting Training Area (Old)	5
FTBL-32+	Biggs Army Airfield Fire Training Pit	5
FTBL-33	Raytheon Chromic Acid Pit	5
FTBL-34	Raytheon 90-Day Hazardous Waste Storage Facility	5
FTBL-35	Evaporation Area for Chromic Acid Solution	5
FTBL-36	Waste Accumulation Areas - Bldg. 11108	5
FTBL-37	Waste POL Tank Near Bldg. 11108	5
FTBL-38	Vehicle Fueling Area Sump	5
FTBL-39	Oxidation Lagoon (NCO Academy)	5
FTBL-40	Pathological Incinerator	6
FTBL-41	Waste Accumulation Area - Room 3J3	6
FTBL-42	Xylene Still	6
FTBL-43	Dumpsters for Biohazardous Waste	6
FTBL-44	Sanitary Sewer System	4
FTBL-45	Storm Drainage System	4

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SWMU Site Number	Name of Unit	Figure No.
FTBL-46	Motor Pool Waste Accumulation Areas	4
FTBL-47	Grease Racks	4
FTBL-48	Other Waste Accumulation Areas	4
FTBL-49	Oily Ditches Near the Vehicle Maintenance Area	4
FTBL-50	Pesticide Storage and Mixing Area, Butler Buildings 60-36 and 60-276	4
FTBL-51	Pesticide Storage/Mixing Area	4
FTBL-52	Spent Battery Acid Storage Area	4
FTBL-53	Drip Pans at the Battery Charging Area	4
FTBL-54	Former Neutralization Tank	4
FTBL-55	Chemical Sump at Battery Shop	4
FTBL-56	Bird Bath	4
FTBL-57	Primary Sedimentation Tanks	4
FTBL-58	Waste Oil Holding Tanks	4
FTBL-59	Sedimentation Pond	4
FTBL-60	Wastewater Holding Tank	4
FTBL-61	Sand Filters	4
FTBL-62	Final Sedimentation Tank	4
FTBL-63†	Herbicide Storage Building No. 11160	5
FTBL-64†	Orogrande Oxidation Lagoon	8
FTBL-65†	Dona Ana Oxidation Lagoon	9

\* Site is on the Part B Permit application

+ Site will be closed as described in reference 22.

† Site is not listed as a SWMU in the RFA report by A.T. Kearney  
(reference 20).



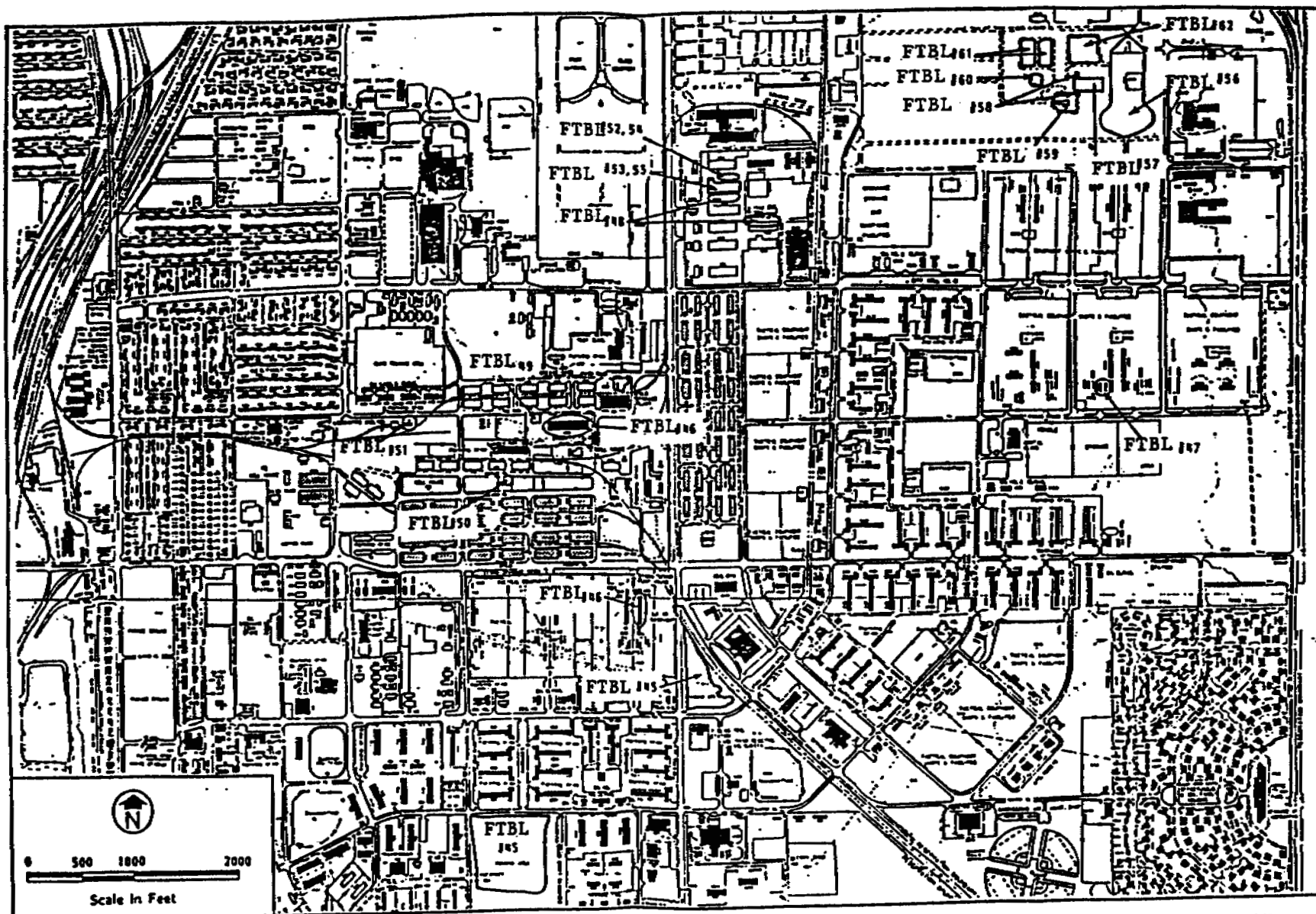


Figure 4. SOLID WASTE MANAGEMENT UNITS LOCATED IN MAIN CANTONMENT AREA - FORT BLISS MILITARY RESERVATION  
Source: Reference 20



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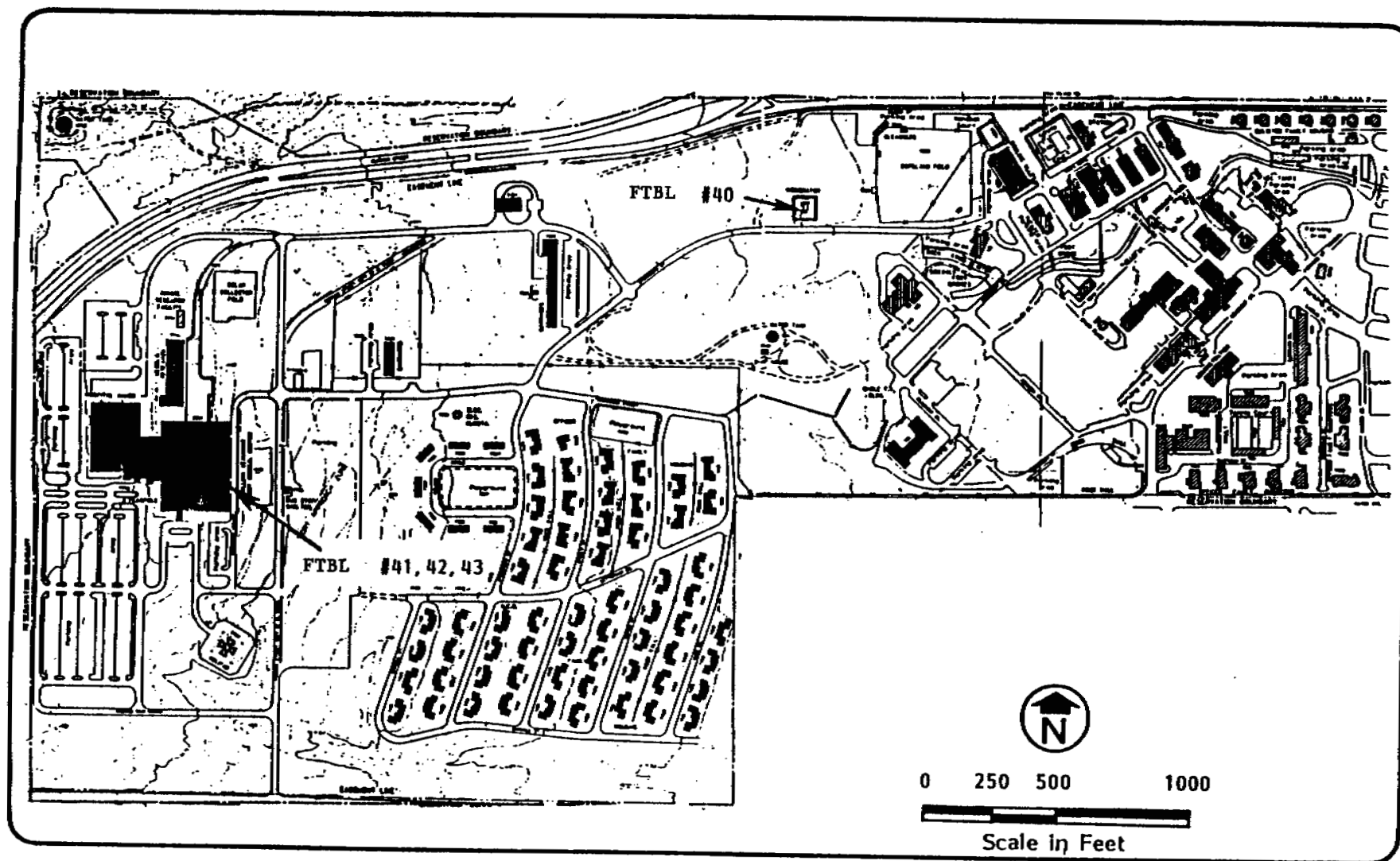


Figure 6

SOLID WASTE MANAGEMENT UNITS LOCATED NEAR  
WILLIAM BEAUMONT ARMY MEDICAL CENTER  
FORT BLISS MILITARY RESERVATION  
Source: Reference 20

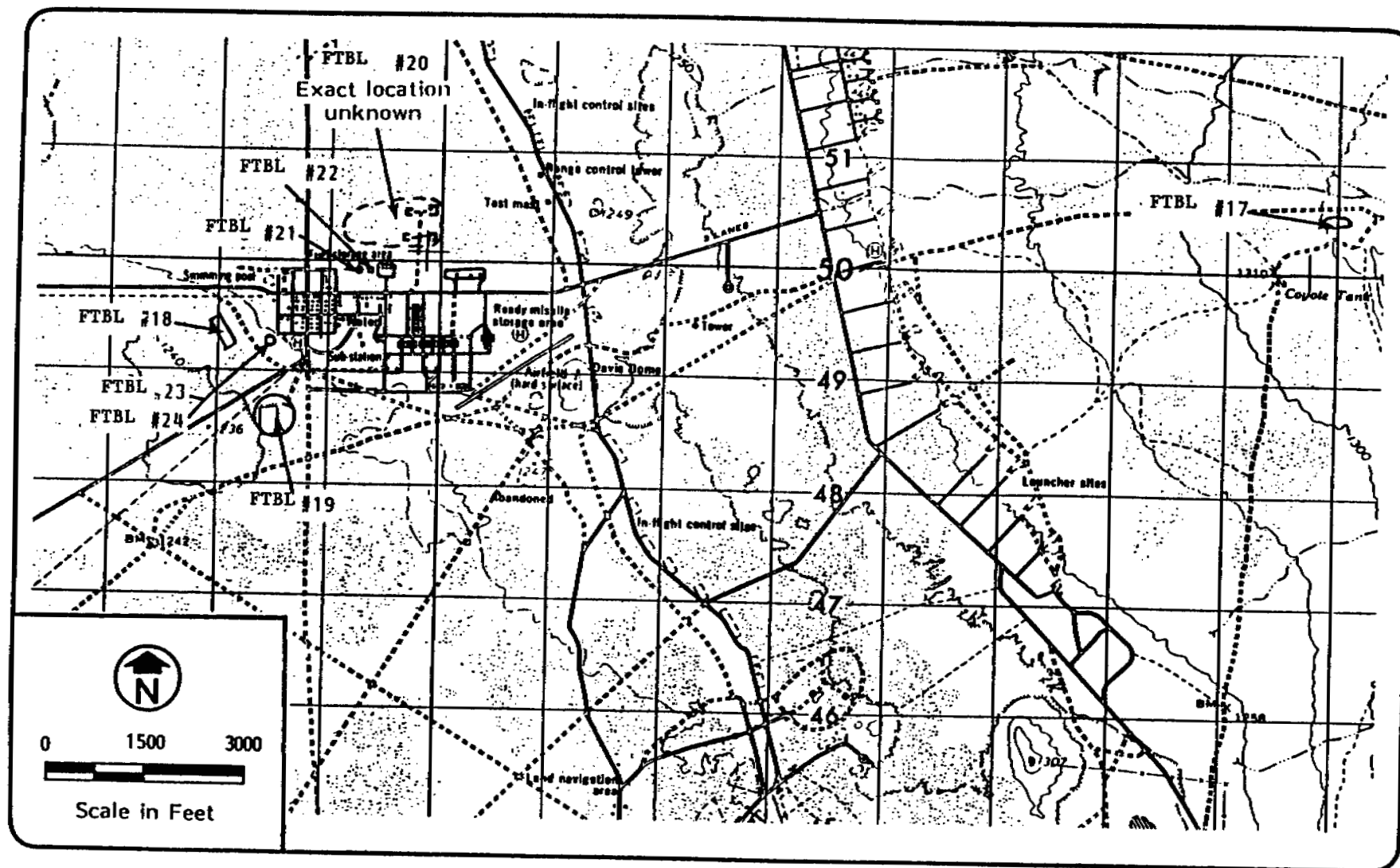


Figure 7

SOLID WASTE MANAGEMENT UNITS LOCATED NEAR MCGREGOR RANGE CAMP  
FORT BLISS MILITARY RESERVATION  
Source: Reference 20

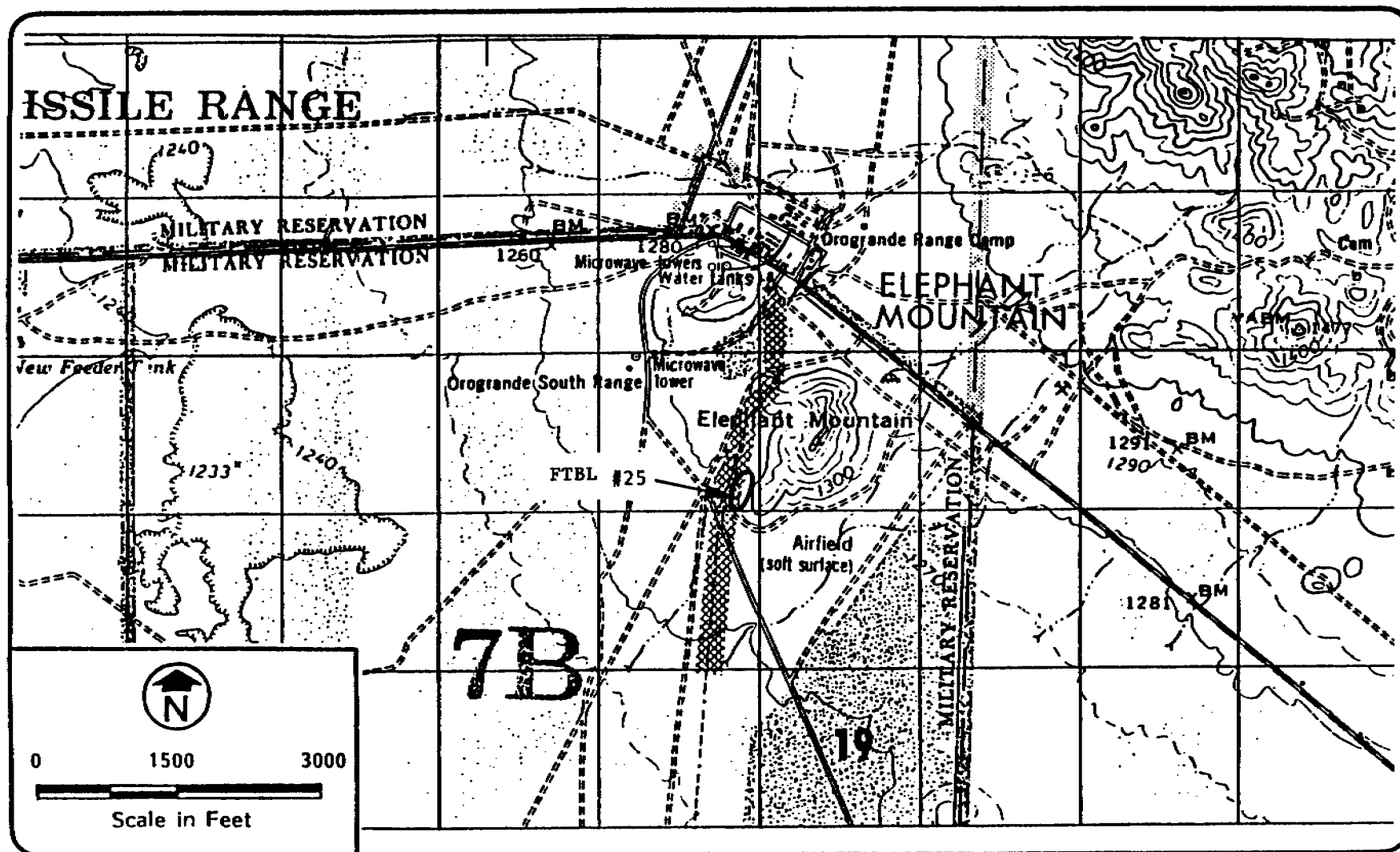


Figure 8

SOLID WASTE MANAGEMENT UNITS LOCATED NEAR OROGRANDE RANGE CAMP  
FORT BLISS MILITARY RESERVATION  
Source: Reference 20

16

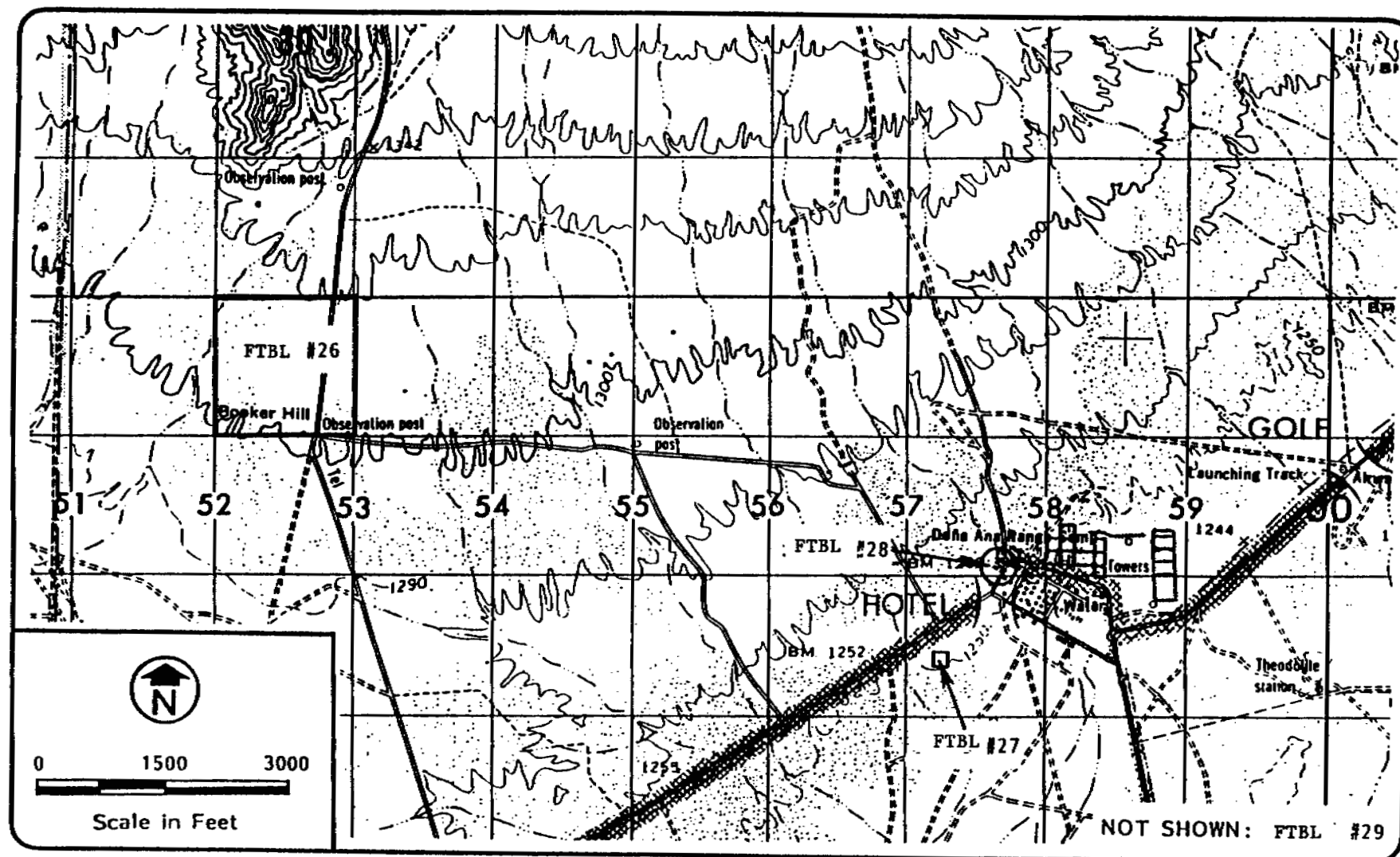


Figure 9

SOLID WASTE MANAGEMENT UNITS LOCATED NEAR DONA ANA RANGE CAMP  
FORT BLISS MILITARY RESERVATION  
Source: Reference 20

TABLE 2. SOLID WASTE MANAGEMENT UNITS DESIGNATED FOR FURTHER INVESTIGATION

<u>SWMU Site Number</u>	<u>Proposed Investigation</u>
FTBL-1	Determine the amount and type of any hazardous wastes placed in this site, if any. Investigate and sample one trench if hazardous wastes were placed in the landfill.
FTBL-3	Excavate perpendicular to south end of one trench, investigate for leachate migration.
FTBL-4	Determine the rate and extent of contaminant migration from this site. Analyze the liquid for identification of any hazardous waste constituents.
FTBL-30	Identify the nature and extent of contamination in the soil.
FTBL-31	Identify the nature and extent of contamination in the soil.
FTBL-39	Identify the nature and extent of contamination in the soil.
FTBL-45	Test composite sediment sample at the pond discharge point for Appendix IX parameters.
FTBL-50	Analyze soil in and around the buildings for pesticide contamination.
FTBL-63	Analyze soil under the herbicide storage building for contamination.

## 6. CONCLUSIONS.

a. Additional environmental sampling is needed at nine SWMUs to determine if a release of hazardous constituents has occurred. Those SWMUs are FTBL-1, FTBL-3, FTBL-4, FTBL-30, FTBL-31, FTBL-39, FTBL-45, FTBL-50, and FTBL-63. Environmental work at these SWMUs was described by the EPA and the Texas Water Commission and was accepted conceptually by U.S. Army representatives during the 29 September 1989 meeting (reference 21).

b. No further site specific environmental investigation is needed at the remaining 56 SWMUs due to either the very low potential for release or the demonstrated lack of a release by environmental investigation.

## 7. RECOMMENDATIONS.

a. To ensure regulatory compliance with 40 CFR 264.101 and 40 CFR 270.14 we recommend the following: implement environmental investigations at SWMUs FTBL-1, FTBL-3, FTBL-4, FTBL-30, FTBL-31, FTBL-39, FTBL-45, FTBL-50, and FTBL-63.

b. To ensure regulatory compliance with 40 CFR 257.1 we recommend the following: Close and cleanup FTBL-16, the Rubble Dump Spill Site.

*Wayne A. Fox*

WAYNE A. FOX  
Geologist  
Waste Disposal  
Engineering Division

## APPROVED:

*John W. Bauer*  
JOHN W. BAUER, P.G.  
Program Manager  
Ground Water and Solid Waste  
Management



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## APPENDIX A

### REFERENCES

1. Title 40, CFR, 1988 rev, Part 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
2. Installation Assessment of the Headquarters, U.S. Army Air Defense Center and Fort Bliss, Texas, Report No. 335, Environmental Science and Engineering, Inc., Gainesville, Florida, prepared for U.S. Army Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, Maryland, October 1983.
3. Letter, USAEHA, HSE-ES/WP, 29 June 1976, subject: Solid Waste General Survey No. 26-014-76, Fort Bliss, Fort Bliss, Texas, 2-6 February 1976.
4. Title 40, CFR, 1988 rev, Part 265, Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
5. Letter, USAEHA, HSHB-ES-E/WP, 11 April 1984, subject: Hazardous Waste Management Consultation No. 37-26-0349-84, Soil Contaminated with Chromic Acid, Fort Bliss, Texas, 15-19 August 1983.
6. Letter, USAEHA, HSHB-ME-SH, 8 September 1986, subject: Hazardous Waste Special Study No. 37-26-0588-86, Identification of Unknown Wastes, Fire Fighting Training Area, Fort Bliss, Texas, 15-18 September 1985.
7. Letter, USAEHA, HSHB-ME-S, 30 July 1986, subject: Hazardous Waste Study No. 37-26-0538-86, Fire Training Pit, Fort Bliss, El Paso, Texas, 11-22 September 1985.
8. Letter, USAEHA, HSHB-ES-E/WP, 28 July 1984, subject: Hazardous Waste Management Survey No. 37-26-0277-84, Fort Bliss, Texas, 17-28 January, 13-17 March, and 14-18 August 1983.
9. Title 40, CFR, 1988 rev, Part 261, Identification and Listing of Hazardous Waste.
10. Letter, USAEHA, HSHB-ES-E, 12 November 1985, subject: Preliminary Report, Hazardous Waste Study No. 37-26-0538-86, Fire Training Pit, Fort Bliss, El Paso, Texas, 11-22 September 1985.

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11. Letter, USAEHA, HSE-MW, 4 May 1978, subject: Soil Analysis from Fort Bliss Sanitary Landfill, No. 38-66-0190-79.
12. Title 40, CFR, 1988 rev, Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.
13. Title 40, CFR 1988 rev, Part 257, Criteria for Classification of Solid Waste Disposal Facilities and Practices.
14. Title 40, CFR, 1988 rev, Part 260, Hazardous Waste Management System: General.
15. Title 40, CFR, 1988 rev, Part 270, EPA Administered Permit Programs: The Hazardous Waste Permit Program.
16. Fort Bliss, Texas Terrain Analysis, September 1978, U.S. Army Engineer Topographic Laboratories, Fort Belvoir, Virginia.
17. Promulgated Rules, Hazardous Waste Management System; Proposed Codification of Statutory Provisions, 51 Federal Register (FR) 10722, 1 December 1987.
18. AR 40-5, 30 August 1986, Preventive Medicine.
19. Memorandum, USAEHA, HSHB-ME-SE, 3 June 1988, subject: Interim Final Report, Hazardous Waste Consultation No. 37-26-1647-88, Evaluation of Solid Waste Management Units, Fort Bliss, Texas, 3-7 August 1987.
20. RCRA Facility Assessment PR/VSI Report, U.S. Army Air Defense Artillery Center and Fort Bliss, Texas, prepared for the U.S. Environmental Protection Agency by A.T. Kearney, Inc., March 1989.
21. Meeting between the following personnel: Mr. Bert Gorrod, EPA; Mr. Alan Church, Texas Water Commission; Ms Jean Schumacher, U.S. Army Corps of Engineers, Kansas City District; Mr. Michael Resch, Hunter Environmental Services, Inc.; Mr. Fazlur Rab, Fort Bliss DEH; Ms Sylvia Andrade, Fort Bliss DEH; and Mr Wayne Fox, USAEHA; 29 September 1989, subject: Preliminary Corrective Action for SWMUs at Fort Bliss.
22. "Closure Plan for the Fort Bliss - Former Fire Fighting Training Area and Contiguous Drum Storage Area," Second Revised Final, August 1989, prepared by Law Environmental, Inc. for the U.S. Army Corps of Engineers, Kansas City District.
23. "Work Plan, RCRA Facility Investigation, Fort Bliss, El Paso, Texas," Draft, August 1989, prepared by Hunter/ESE, Inc. for the U.S. Army Corps of Engineers, Kansas City District.

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## APPENDIX B

### PERSONNEL CONTACTED

1. Mr. Fazlur Rab, Chief, Environmental Protection, Directorate of Engineering and Housing (DEH).
2. Ms. Sylvia Andrade, Environmental Engineer, DEH.
3. Mr. Rafael Nickolas, Environmental Engineer, DEH.
4. Mr. R. Nickolas Jr., Environmental Engineer, DEH.
5. Mr. Luis M. Acuna, Environmental Technician, DEH.
6. Mr. Edwardo Hernandez, Operator, Sanitary Landfill.
7. Mr. Herbert Gorrod, EPA, Region VI.
8. Mr. Alan P. Church, Civil Engineer, Texas Water Commission.

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## APPENDIX C

### DESCRIPTION OF SOLID WASTE MANAGEMENT UNITS

NOTE: This Appendix contains information from the following references: 19, 20, and 23. Information for those SWMUs not listed during field work accomplished by USAEHA in August 1987 (reference 19) was extracted from field work done by A.T. Kearney, Inc. in March 1989 (reference 20). The numbering system used in this report is the same as the one used in the A.T. Kearney report (reference 20), except the prefix "FTBL-" was added to each number to distinguish Fort Bliss SWMUs in the overall U.S. Army system.

1. UNIT NUMBER AND NAME: FTBL-1, Landfill No. 1.

a. Type of Unit. Active Sanitary Landfill.

b. Location of Unit. See Figure 5.

c. Unit Description. This currently operating trench and fill-type landfill (Permit No. 1422, Texas Department of Health, expiration 2002) encompasses approximately 106 acres. A bulldozer covers and compacts the waste daily.

d. Dates of Operation. 1974 to present.

e. Waste Description. Waste consists mainly of municipal-type refuse but also includes the disposal of hospital incinerator ash, infectious waste, asbestos, paint shop wastes, desiccant, and leak test compounds.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None known.

h. Environmental Recommendations. None. The northeast corner of the landfill site is adjacent to the Fort Bliss Water Supply Well No. 14; however, it is improbable that leachate would contaminate the well water. First with average annual rainfall less than 10 inches and average evaporation rates near 100 inches, it is unlikely that leachate would develop. Secondly, the shallowest aquifer tapped by the well is protected by more than 50 feet of impermeable clay as part of the 250 feet of overlying sediments. Therefore, should leachate develop, its migration would be mitigated by these impermeable layers.

i. References. 1, 2, 7, 10, 20, and R. Nickolas Jr.

2. FTBL-2: RUBBLE PIT NO. 1

DESCRIPTION

Unit Type: This unit is an active open rubble disposal area. It is located about 750 feet southeast of and contiguous with the active landfill (SWMU No. 1).

Purpose of Unit: This unit is used to dispose of demolition debris, as well as other waste construction material and some sanitary wastes (Ref. 100).

Regulatory Status: Permit No. 1422, Texas Department of Health (expires in the year 2002) (Ref. 1).

Period of Operation: From 1974 to the present.

Dimensions/Volume: The area designated for rubble disposal is about 20 acres.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Haul trucks unload demolition and other debris on a raised area of fill material and over the sides of the fill (Ref. 100).

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Wastes managed are mainly construction/demolition wastes consisting of scrap concrete, asphalt, wood, metal, and tires, but also includes waste from minor dumping of sanitary waste such as kitchen material, including food (Ref. 100).

Sources of Wastes: Construction/demolition waste from a wide variety of unknown sources on the reservation.

Disposition of Waste: This unit is considered to be the final disposition.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted (Ref. 1).

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: No releases known (Ref. 1).

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: The arid climate, the nature and thickness of the subsurface materials, and the type of material disposed of reduce the potential for releases to the environment.



3. UNIT NUMBER AND NAME: FTBL-3, Landfill No. 2.

a. Type of Unit. Closed Sanitary Landfill.

b. Location of Unit. See Figure 5.

c. Unit Description. This trench-type landfill encompasses approximately 101 acres. It is reported that there is 2 feet of earth cover. Abandoned trenches and subsidence is evident. There is extensive open dumping of construction rubble in the area of the landfill. The abandoned trenches are vegetated.

d. Dates of Operation. 1954 to 1974.

e. Waste Description. Waste consists mainly of municipal-type refuse and several areas on the surface are covered with concrete construction debris.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None.

h. Environmental Recommendations. Excavate perpendicular to south end of one trench, investigate for hazardous waste. The northeast corner of the landfill site is adjacent to the Fort Bliss Water Supply Well No. 14; however, it is improbable that leachate would contaminate the well water. First with average annual rainfall less than 10 inches and average evaporation rates near 100 inches, it is unlikely that leachate would develop. Secondly, the shallowest aquifer tapped by the well is protected by more than 50 feet of impermeable clay as part of the 250 feet of overlying sediments. Therefore, should leachate develop, its migration would be mitigated by these impermeable layers.

i. References. 1, 7.

4. UNIT NUMBER AND NAME: FTBL-4, Oil Pits Near Landfill No. 2.

a. Type of Unit. Disposal Pits.

b. Location of Unit. Immediately east of Landfill No. 2.

c. Unit Description. Eight oblong shallow pits are present, one of which is filled with suspected waste oil (approximately 30 X 100 feet and 10 feet deep). Another pit contains a dark dry tar-like material at the base.

d. Dates of Operation. Unknown, but possibly the same as Landfill 2, 1954 to 1974.

e. Waste Description. Oily waste.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. Oily liquid migration into the subsurface.

h. Environmental Recommendations. Determine the rate and extent of contaminant migration from this site. Analyze the liquid for identification and hazardous waste constituents. The northeast corner of the landfill site is adjacent to the Fort Bliss Water Supply Well No. 14; however, it is improbable that oily waste would contaminate the well water. The shallowest aquifer tapped by the well is protected by more than 50 feet of impermeable clay as part of the 250 feet of overlying sediments. Therefore, oily waste migration would be mitigated by these impermeable layers.

i. References. 1, 7, and R. Nickolas Jr.

5. FTBL-5: RUBBLE PIT NO. 2 (NEAR LANDFILL NO. 2)

DESCRIPTION

Unit Type: The rubble pit contains construction/demolition debris. It is located north of an old paved road on the north side of Landfill No. 2 (SWMU No. 3).

Purpose of Unit: This unit is used to dispose of rubble material.

Regulatory Status: Unregulated.

Period of Operation: From 1957 to 1974 and perhaps later.

Dimensions/Volume: Size is a maximum of approximately 60 acres.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The material appears to have been dumped by truck into numerous small piles on the ground surface.

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Material disposed of consists mainly of construction/demolition debris including concrete, asphalt, wood, metal, tires, and similar materials.

Sources of Wastes: From a variety of unknown sources on the reservation.

Disposition of Waste: The unit is considered to be the final disposition.

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted (Ref. 1).

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: No releases known.

# RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: The arid climate, the nature and thickness of the subsurface materials, and the type of material disposed of reduce the potential for releases to the environment.

6. UNIT NUMBER AND NAME: FTBL-6, Landfill No. 3.

a. Type of Unit. Closed Rubble Landfill.

b. Location of Unit. See Figure 5.

c. Unit Description. This trench-type landfill encompasses approximately 101 acres. The landfill is capped with 2 feet of earth cover.

d. Dates of Operation. 1978 to 1982.

e. Waste Description. Rubble, including an area of illegal dumping at approximately one-third square mile. Sand and gravel is extensive and is used onpost (gravel was deposited by the course of the ancient Rio Grande River).

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None known or suspected.

h. Environmental Recommendations. None. The site of this former landfill is also in the vicinity of the current landfill (FTBL-001) and, therefore, falls under the same environmental conditions (see paragraph 1h).

i. References. 1, 7.

7. FTBL-7: LANDFILL NO. 4A

DESCRIPTION

Unit Type: This unit is a landfill of unknown construction, possibly trench type. It is located east of Southern Pacific Railroad east of Logan Heights, and immediately north of 100-year floodplain ponding area.

Purpose of Unit: Disposed of waste material, presumably mostly construction rubble, from various unknown sources on the reservation.

Regulatory Status: Unregulated.

Period of Operation: Unknown, probably in the 1950s and 1960s, although later unauthorized dumping has left numerous piles of debris (Ref. 100).

Dimensions/Volume: Approximately 50 acres.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☒ Near Surface Water ☒ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The waste material may have been covered with 2 feet of soil, but recent dumping has left waste exposed at the surface. The large 100-year floodplain basin has water only in its northern end, in the form of two ponds just south of Landfill No. 4A.

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: The landfill reportedly contains household and construction/demolition rubble, with no industrial waste. Material in piles on the ground surface include rubble, tree stumps and branches, concrete, asphalt, and similar materials. Some of these piles were clearly dumped after the 1960s, and other unknown wastes (possibly containing hazardous constituents) may have been disposed of previously (Ref. 100).

Sources of Wastes: Various sources from the reservation, plus probable unauthorized dumping after the 1960s.

Disposition of Waste: This unit is considered to be the final disposition.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG



VSI Noted Release Conditions: None noted.

Detail of Past Releases: No releases known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>  X  </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: The arid climate and the nature and thickness of the subsurface materials reduce the potential for releases to the environment. The water supply aquifer in the area is protected from potential releases by very thick sediments, some of which are clay-rich and with low permeability (Ref. 1). If waste liquids were disposed of, and since wastes may have included hazardous constituents, a release to the soil is possible.

8. FTBL-8: LANDFILL NO. 4B

DESCRIPTION

Unit Type: This landfill was a trench type unit. Some faint parallel contour rows are visible, but otherwise no obvious remnant features exist. Some surface dumping was done after the landfill became inactive. This unit is located between Southern Pacific Railroad and new Highway 54, east of Logan Heights housing area and Logan Elementary School.

Purpose of Unit: To dispose of waste material from the reservation.

Regulatory Status: Unregulated.

Period of Operation: From 1954 to 1957 (Ref. 1).

Dimensions/Volume: Approximately 100 acres.

Material of Construction:

Underlain By:     ☐ Concrete     ☐ Asphalt     ☐ Gravel  
                     ☐ Grass           ☒ Soil

Environmental:   ☐ Indoors     ☐ Near Surface Water     ☒ In Ground  
                     ☒ Outdoors     ☐ Near Drinking Water     ☐ Above Ground  
                     ☒ Covered     ☒ Residences             ☐ Below Ground

Details: Landfill waste material was capped with 2 feet of earth cover. The site is adjacent to (across the street from) Logan Heights residences. The area north of the landfill is planned for excavation and housing construction beginning in 1990 (Refs. 1, 100).

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Reportedly, this landfill received the same type of material as the active landfill (SWMU Nos. 1 & 2), which includes municipal-type refuse and medical wastes. Considering the period of use, this unit may contain a variety of other unidentified wastes that could be hazardous including spent solvents and other materials.

Sources of Wastes: Various unidentified sources on the reservation.

Disposition of Waste: Unit is considered to be the final disposition.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted (Ref. 1).

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: No releases known (Ref. 1).

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>  X  </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: The arid climate and the nature and thickness of the subsurface materials reduce the potential for releases to the environment. The water supply aquifer in the area is protected from potential releases by very thick sediments, some of which are clay-rich and with low permeability (Ref. 1). Since wastes probably contained hazardous constituents, and since no release controls were present, the potential for releases to soil is medium.

9. UNIT NUMBER AND NAME: FTBL-9, Landfill No. 5.

a. Type of Unit. Closed Sanitary Landfill.

b. Location of Unit. See Figure 5.

c. Unit Description. This landfill incorporates approximately 20 acres. The site was covered with 2 feet of earth cover. Four short trenches can be observed. Subsidence and mounding are present.

d. Dates of Operation. 1947 to 1967.

e. Waste Description. Household garbage. Nonindustrial. Observable wastes from field investigation are rubble, tree stumps, concrete, road material, and other construction debris.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None known or suspected.

h. Environmental Recommendations. None.

i. References. 1, 7.

10. UNIT NUMBER AND NAME: FTBL-10, Landfill No. 6.

a. Type of Unit. Disposal Area.

b. Location of Unit. Disposal area has not been located.

c. Unit Description. Area size approaches 99 acres. The landfill has an earth cover.

d. Dates of Operation. 1947 to 1967.

e. Waste Description. Household waste and Air Force parts and waste.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None evident.

h. Environmental Recommendations. None.

i. References. 1, 7, and R. Nickolas Jr.

11. UNIT NUMBER AND NAME: FTBL-11, Landfill No. 7.

a. Type of Unit. Closed Sanitary Landfill.

b. Location of Unit. See Figure 5.

c. Unit Description. This site is a pre-WW II dump encompassing 5 acres. Waste was reported to have been covered periodically. Disposal area is developed into barracks and parking lots. There are no visible signs of this disposal site.

d. Dates of Operation. 1940 to 1946.

e. Waste Description. Horseshoes, bottles, timber, and paper.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None evident or suspected.

h. Environmental Recommendations. None.

i. References. 1, 7.

12. UNIT NUMBER AND NAME: FTBL-12, Landfill No. 8.

a. Type of Unit. Closed Disposal Area.

b. Location of Unit. See Figure 5. The cantonment area masks the location and the surface of this disposal site.

c. Unit Description. This was a pre-WW II site covering 15 acres. Waste is reported to have been covered periodically.

d. Dates of Operation. Pre-WW II to 1940.

e. Waste Description. Horseshoes, timber, bottles, and papers.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None evident or suspected.

h. Environmental Recommendations. None.

i. References. 1, 7.



13. UNIT NUMBER AND NAME: FTBL-13, Landfill No. 9.

a. Type of Unit. Closed Disposal Area.

b. Location of Unit. See Figure 5.

c. Unit Description. Disposal site is completely covered and masked by the cantonment area in the vicinity of Building No. 311. Area size is 10 acres. Waste is reported to have been covered periodically.

d. Dates of Operation. 1942 to 1946.

e. Waste Description. Horseshoes, bottles, and metals.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None evident or suspected.

h. Environmental Recommendations. None.

i. References. 1, 7.

14. UNIT NUMBER AND NAME: FTBL-14, Landfill No. 10.

- a. Type of Unit. Closed Landfill.
- b. Location of Unit. Landfill has not been located.
- c. Unit Description. Not available. The FTBL DEH personnel report that this landfill has not been located.
- d. Dates of Operation. 1946 to 1950.
- e. Waste Description. Hospital wastes.
- f. Previous Environmental Monitoring. None known.
- g. Known/Suspected Releases. None known.
- h. Environmental Recommendations. None.
- i. References. 1, 7, and R. Nickolas Jr.

15. FTBL-15: RUBBLE DUMP - BIGGS ARMY AIRFIELD

DESCRIPTION

Unit Type: This unit is a rubble dump, consisting of numerous mounds of debris on the surface. It is located north and east of the NCO Oxidation Pond (SWMU No. 39), which is east of the airfield runway.

Purpose of Unit: This unit was used for disposal of various waste debris from Biggs and other areas; some unauthorized dumping may occur (Ref. 100).

Regulatory Status: Unregulated.

Period of Operation: Unknown, but until recently.

Dimensions/Volume: Approximately 20 acres.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Unit consists of numerous mounds of debris dumped over a low area surrounding the berms of the Oxidation Pond (Ref. 100).

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

## WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Typical rubble-type material, consisting of construction/demolition debris, tree stumps and branches, metal and plastic containers, and other similar material.

Sources of Wastes: Unknown, but presumably from the Biggs Army Airfield; also some unauthorized dumping may have taken place or may be ongoing (Ref. 100).

Disposition of Waste: This unit is considered to be the final disposition.

## RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

## MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

## RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: No releases known.

RELEASE POTENTIAL

Air	<u>X</u> Low	_____ Medium	_____ High
Soil/Groundwater	<u>X</u> Low	_____ Medium	_____ High
Surface Water	<u>X</u> Low	_____ Medium	_____ High
Subsurface Gas Generation	<u>X</u> Low	_____ Medium	_____ High

Detail of Release Potential: The arid climate, the nature and thickness of the subsurface materials, and the type of material disposed of reduce the potential for releases to the environment (Ref. 1).

16. UNIT NUMBER AND NAME: FTBL-16, Rubble Dump Spill Site.

a. Type of Unit. Rubble Dump.

b. Location of Unit. See Figure 5. West of Site Monitor Facility.

c. Unit Description. This site is a large (2 square miles) open dump.

d. Dates of Operation. Initial dumping date is not known. At the time of our field investigation, dumping appeared to be continuing.

e. Waste Description. Construction debris, service station waste, autos, household debris, furniture, and a large (approximately 100 feet X 50 feet) spill of grease or septic material.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. One spill, potentially grease and/or oil.

h. Environmental Recommendations. Close open dump. Cleanup in accordance with 40 CFR 257.1. Implement good engineering practices. Sample spill to characterize material.

i. References. 14 and R. Rickolas Jr.

17. UNIT NUMBER AND NAME: FTBL-17, EOD Open Demolition Area.

a. Type of Unit. Active Open Detonation Area.

b. Location of Unit. See Figure 7. East of the McGregor Rubble Pit.

c. Unit Description. The EOD range contains two demolition sites used for EOD and demolition training. The maximum explosive material limit at Demolition Site 1 (Patriot Site) is 453.6 kg (TNT equivalent). This site was used very infrequently by EOD personnel in the past and is no longer an active EOD site. This small site consists of two narrow pits with some lightly colored stains present. No shell bodies were observed. Unlimited amounts of explosive material are authorized at Demolition Site 2 (FAW 10). The 41st EOD conducts explosives demolitions at the EOD range approximately two to three times per quarter. Explosives are blown with C-4 in existing demolition pits, which are visually inspected following each blow. The demolition area is operated under RCRA interim status (40 CFR 265) as an HW thermal treatment facility. Quantities of explosives destroyed average approximately 900 kg per quarter, while demonstrations consist of 2.3 to 4.5 kg charges. Powder burning conducted by the 41st EOD ceased over 1 year ago and is not planned to occur in the foreseeable future. This was and still is the major EOD demolition site. Some shell bodies are present in the pit; however, no stains or burned areas were observed.

d. Dates of Operation. 1965 to present.

e. Waste Description. Explosives, unserviceable ammunition, and unexploded ordnance. According to the HW definition (40 CFR 261), residue from HW treatments are, themselves, considered to be hazardous by characteristic of reactivity until proven otherwise. Since the original explosive wastes treated are hazardous by characteristic of reactivity, the residues must also be considered reactive until proven otherwise.

f. Previous Environmental Monitoring. No sampling and analysis of residues generated by these activities have been performed.

g. Known/Suspected Releases. Suspected low concentrations of explosives and/or heavy metals.

h. Environmental Recommendations. None.

i. References. 1, 3, 7, 8.

18. UNIT NUMBER AND NAME: FTBL-18, Landfill No. 13, McGregor Range Rubble Pit.

- a. Type of Unit. Active Rubble Pit.
- b. Location of Unit. See Figure 7. Located southeast of the McGregor Range.
- c. Unit Description. This trench-type rubble pit encompasses 2 acres. Reported to be covered once per month.
- d. Dates of Operation. 1983 to present.
- e. Waste Description. Trash and construction debris.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7, 11.



19. UNIT NUMBER AND NAME: FTBL-19, McGregor Oxidation Lagoon.

a. Type of Unit. Oxidation Lagoon.

b. Location of Unit. See Figure 7. McGregor Range.

c. Unit Description. Domestic wastewater oxidation lagoon. Field investigation found liquid at a high level, covering the entire lagoon surface. Freeboard appeared to be several feet. The lagoon is reported to be lined.

d. Dates of Operation. Unknown.

e. Waste Description. Domestic wastewater.

f. Previous Environmental Monitoring. None known.

g. Known/Suspected Releases. None known.

h. Environmental Recommendations. None.

i. Reference. R. Nickolas Jr.

20. PTBL-20: INACTIVE OPEN DETONATION AREA

DESCRIPTION

Unit Type: This unit is an inactive open detonation area that has not been exactly located and very little is known about it. It may have consisted of several small pits (Refs. 1, 100). It is located north of McGregor Range Camp, and north of the fire training area (SWMU No. 21).

Purpose of Unit: This unit was reportedly used for detonation of explosive materials.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Possibly up to 1958

Dimensions/Volume: Unknown.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: On surface of ground, possibly in several shallow trenches or pits (Refs. 1, 100).

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input checked="" type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Approximate area of presumed detonation site contained scrap metal and other rubble from old Nike components (Ref. 100).

Sources of Wastes: Unspecified detonation materials from McGregor Range.

Disposition of Waste: This is considered to be the final disposition.

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted (Ref. 1).

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input checked="" type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: Past releases to soil may include heavy metals and reactive material.

RELEASE POTENTIAL

Air	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown
Soil/Groundwater	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown
Surface Water	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown
Subsurface Gas Generation	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown

Detail of Release Potential: Releases to the environment are considered minimal due to the small amount of observable potential contamination; however, because of the lack of knowledge of this unit it is premature to make a positive statement.

21. FTBL-21: INACTIVE FIRE TRAINING AREA

DESCRIPTION

Unit Type: This unit is a fire training area with a burned jet fuselage on the soil.

Purpose of Unit: This unit is used for the training of personnel in the practice of extinguishing aircraft which have caught fire.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Reportedly up to 1983, although it may have been used intermittently since then; apparently the unit is inactive

Dimensions/Volume: An area of about 25 by 10 yards.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Burned fuselage lies immediately on contaminated soil.

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Waste materials include waste oil, fuel, solvents, and possibly other unknown substances.

Sources of Wastes: From the adjacent waste drum storage area and from the aircraft fuselage.

Disposition of Waste: Waste material has infiltrated and heavily stained the soil (Ref. 100).

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

#### RELEASE HISTORY

<input checked="" type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input checked="" type="checkbox"/> Past Release to Soil/GW	<input checked="" type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: The soil around the aircraft fuselage is stained dark brown by the flammable liquid waste.

Detail of Past Releases: The practice of dousing and burning aircraft has released hazardous constituents to the soil and air. Reportedly, this practice has been discontinued at this site (Ref. 100).

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>      </u> Medium	<u>  X  </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Assuming that the unit is no longer active, release potential to the air is low. Soil releases are evident and the surface of the ground is heavily stained by waste materials.

22. FTBL-22: WASTE DRUM STORAGE AREA

DESCRIPTION

Unit Type: This unit is a drum accumulation area for waste flammable materials in 55-gallon drums. Some drums are stored on pallets. The area is fenced (Ref. 100).

Purpose of Unit: The unit is used for storage of waste flammable materials that were used in the adjacent fire training area (SWMU No. 21).

Regulatory Status: Non-RCRA regulated.

Period of Operation: Up to 1983 (Ref. 100).

Dimensions/Volume: The drum storage area occupies less than 1 acre; about 135 drums are present in the northern part of the fenced area (Ref. 100).

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Some drums sit on pallets; most are directly on soil. The area is fenced by a barbed-wire fence (Ref. 100).

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)



#### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Materials include gasoline, waste oil, fuels, and some solvents or other chemicals (Ref. 100).

Sources of Wastes: Presumably from the motor pools and other sources at McGregor Range Camp and stored at the site for use at the fire training area (SWMU No. 21).

Disposition of Waste: Waste drums remain at the site, some leaking onto the soil and pallets.

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

#### RELEASE HISTORY

<input checked="" type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input checked="" type="checkbox"/> Past Release to Soil/GW	<input checked="" type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: Obvious leakage to the soil was continuing from drums of oil and possibly other materials; some drums had an obvious odor of oil or fuel.

Detail of Past Releases: Drums of all materials had been leaking and volatilizing to the environment for an unknown period of time.

RELEASE POTENTIAL

Air	<u>      </u> Low	<u>      </u> Medium	<u>  X  </u> High
Soil/Groundwater	<u>      </u> Low	<u>      </u> Medium	<u>  X  </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Release of volatile substance to the atmosphere is high due to the presence of fuels and some solvents. Releases to the soil are clearly evident and will continue until the drums are properly disposed of.

23. FTBL-23: WASH RACK SUMP - PATRIOT DEPT. MOTOR POOL

DESCRIPTION

Unit Type: This unit is an outdoor sump for a vehicle wash rack.

Purpose of Unit: The unit is used to collect waste wash water from the vehicle rinsing area.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Recently built structure, currently operating.

Dimensions/Volume:

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☒ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The sump is located below grade and is constructed of concrete with a metal grid cover (Ref. 100).

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Waste material washed off vehicles is collected in the sump, including dirt, rinse water, and oily waste.

Sources of Wastes: Vehicle wash water.

Disposition of Waste: Wash water is routed to nearby oil/water separator (SWMU No. 24) and then to the McGregor oxidation pond (SWMU No. 19).

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details:

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Oily wash water is discharged to the oil/water separator (see SWMU No. 24) and then to the oxidation pond (SWMU No. 19).

24. PTBL-24: OIL/WATER SEPARATOR - PATRIOT DEPT. MOTOR POOL

DESCRIPTION

Unit Type: This unit is an in-ground concrete oil/water separator with concrete basin.

Purpose of Unit: The unit is used to separate most oil and other floating material on surface of wash water from the bulk of the water discharging to the sewer system.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Recently built structure, currently operating.

Dimensions/Volume: Approximately 50 feet long by 7 feet wide and about 10 feet deep. Structure is separated into two cells.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☒ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Oil/water separator is a concrete basin below ground level with a concrete separating wall.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Material accumulates from a sump (SWMU No. 23) that collects vehicle wash water; this includes dirt, rinse water, and oily waste.

Sources of Wastes: Vehicle wash water nearby.

Disposition of Waste: Water discharges from oil/water separator into the sewer system and then to the McGregor Range Camp oxidation pond (SWMU No. 19).

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input checked="" type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details:

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: An oily sheen was observed on the water on both sides of the oil/water separator; this water discharges to the oxidation pond (SWMU No. 19) and could potentially release to the surface water overflow from that unit.

Detail of Past Releases: Presumably, oily wash water has been discharging to the oxidation pond since construction of the Patriot Motor Pool area.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Oily water from this unit discharges to the oxidation pond (SWMU No. 19).



25. UNIT NUMBER AND NAME: FTBL-25, Landfill No. 14, Orogrande Rubble Pit.

- a. Type of Unit. Active Rubble Pit.
- b. Location of Unit. See Figure 8. Located south of the Oro Grande Range Complex.
- c. Unit Description. This trench-type rubble pit encompasses an area of 2 acres.
- d. Dates of Operation. 1983 to present.
- e. Waste Description. Rubble and trash. Illegal dumping of mostly metal was observed during field investigation.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.

26. UNIT NUMBER AND NAME: FTBL-26, Dona Ana Detonation Area - Range 41.

a. Type of Unit. Open Detonation Range.

b. Location of Unit. See Figure 9.

c. Unit Description. The open detonation (OD) disposal area consists of three small pits. No burn stains were observed during field investigation. The Dona Ana Range 41 is the primary demolition range for engineer construction, demolition, and training. Other participating units are the 52d Engineers and 43d Engineers Companies, and all air defense artillery units having emergency destruction procedures for weapons. This range is infrequently used for OD destruction by 41st EOD. Usage is limited to once or twice per year.

d. Dates of Operation. 1940 - Ongoing. Open detonation operations occur only once per year (on average).

e. Waste Description. Authorized demolitions involve all types of weapons up to 145 kg (TNT equivalent), including Claymore mines and Sharpe charges.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. Suspected low concentrations of explosives and/or heavy metals.

h. Environmental Recommendations. None.

i. Reference. 1.

27. UNIT NUMBER AND NAME: FTBL-27, Landfill No. 12, Dona Ana Rubble Pit.

- a. Type of Unit. Active Rubble Pit.
- b. Location of Unit. See Figure 9. South of Dona Ana Range.
- c. Unit Description. This trench-type rubble pit encompasses an area of 2 acres. Reported to be covered once per month.
- d. Dates of Operation. 1983 to present.
- e. Waste Description. In addition to rubble, this pit receives small arms munitions about once every 3 months (approximately 6.8 to 9.1 kg per year). Large amounts of trash and garbage are present.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None evident or suspected.
- h. Environmental Recommendations. None.
- i. References. 1, 7.

28. FTBL-28: MOTOR POOL WASTE ACCUMULATION AREA - DONA ANA

DESCRIPTION

Unit Type: This unit is an outdoor accumulation area for oil and solvents at the Dona Ana Motor Pool (Bldg. 8013). It is located on the west side of Dona Ana Range Camp.

Purpose of Unit: The unit is used for accumulation of waste oil and unused solvent (degreaser) and hydraulic fluid (Ref. 100).

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: A small area outside the service garage is about 30 by 40 feet in area; a tank for waste oil is about 500 gallons. Thirteen 55-gallon drums are present on pallets or a metal shelf (Ref. 100).

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Drums lie on pallets or metal shelf on the soil; the waste oil tank lies directly on the soil.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Waste oil, unused oil and hydraulic fluid, unused Stoddard solvent (used for degreaser); occasionally some waste fuel (JP-4) is stored here (Ref. 100).

Sources of Wastes: Vehicle maintenance from motor pool garage at Bldg. 8013 at Dona Ana.

Disposition of Waste: Waste that spills or leaks is allowed to infiltrate the soil. Waste oil and solvent are disposed of properly (to Albuquerque).

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input checked="" type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: Minor leaks of waste were seen staining the soil around the used oil tank and some drums.

Detail of Past Releases: No information on past releases was available.

RELEASE POTENTIAL

Air	<u>X</u> Low	_____ Medium	_____ High
Soil/Groundwater	_____ Low	_____ Medium	<u>X</u> High
Surface Water	<u>X</u> Low	_____ Medium	_____ High
Subsurface Gas Generation	<u>X</u> Low	_____ Medium	_____ High

Detail of Release Potential: The only potential for any release is to the soil. Small soil stains were noted near the used oil tank. Because the waste oil is carried by hand from the garage to the tank, there is a higher risk of release.

29. UNIT NUMBER AND NAME: FTBL-29, Landfill No. 11.

a. Type of Unit. Closed Sanitary Landfill.

b. Location of Unit. Dona Ana Range is reported to be the location of this landfill. The landfill was not found during field investigation.

c. Unit Description. This pre-WW II trench-type sanitary landfill encompasses an area of 5 acres. Waste is reported to have been covered periodically.

d. Dates of Operation. Pre-WW II to 1945.

e. Waste Description. Reported to be sanitary waste that includes horseshoes, timber, bottles, and paper.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. None.

h. Environmental Recommendations. None.

i. References. 1, 7.

30. UNIT NUMBER AND NAME: FTBL-30, Hazardous Waste and PCB Storage Facility - Building 11614.

- a. Type of Unit. Hazardous Waste and PCB Storage Facility.
- b. Location of Unit. See Figure 5. Building 11614, east of Biggs Airfield.
- c. Unit Description. The facility includes a secure metal building on a bermed cement pad of approximately 20 feet X 40 feet, with a 6-inch curb. Outdoor PCB storage is on cracked asphalt and soil. Some PCB items are stored in boxes and metal drip pans.
- d. Dates of Operation. 1981 to present.
- e. Waste Description. PCBs, chromic acid, corrosives, ignitables, toxics, and reactives.
- f. Previous Environmental Monitoring. None known.
- g. Known/Suspected Releases. There was evidence of leakage from the box containing PCB capacitors and from non-PCB transformers. Two leaking PCB capacitors were stored in a shallow metal drip pan on soil. Here there is the potential for environmental contamination.
- h. Environmental Recommendations. Develop a sampling plan to determine the extent of PCB contamination adjacent to the storage building. Remedial actions will depend on results of sample analysis and should be coordinated with the State of Texas. Store PCB transformers and capacitors in accordance with requirements set forth in 40 CFR 761.65.
- i. Reference. R. Nickolas Jr.



31. UNIT NUMBER AND NAME: FTBL-31, Fire Fighting Training Area (Old).

a. Type of Unit. Disposal Area, Spill Site.

b. Location of Unit. See Figure 5.

c. Unit Description. This is a fire fighting training site which incorporates approximately 3 acres. A blackened area of approximately 100 x 100 feet was observed. Old vehicles and aircraft were doused with flammable materials and ignited; then the fires were extinguished as part of the firefighter training.

d. Dates of Operation. 1971 to 1981.

e. Waste Description. Fuels, petroleum, oil, and lubricants (POLs), HWs, paints, and solvents.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. Releases are suspected.

h. Environmental Recommendations. Incorporate site investigations and cleanup with the ongoing sampling study currently being conducted at the fire training area west of Biggs Airfield.

i. Reference. R. Nickolas Jr.

32. UNIT NUMBER AND NAME: FTBL-32, Biggs Army Airfield Fire Training Pit.

a. Type of Unit. Fire Training Pit

b. Location of Unit. See Figure 5.

c. Unit Description. The fire training area at Fort Bliss consists of approximately 8-10 burn sites within a 5-acre area near Biggs Army Airfield. During a September 1985 Hazardous Waste Special Study conducted by USAEHA, it was observed that each burn site had 55-gallon drums of waste material stored in the vicinity for use in training exercises. In addition, there was a large centralized storage area for drums at the site. At the time of the study, the training area was found to contain a total of 1,551 drums that potentially held at least 1 inch of material. One hundred sixty empty drums were also found.

d. Dates of Operation. 1980 to 1983.

e. Waste Description. The material within the drums and used for fire training purposes was generated on Fort Bliss and consisted of two basic categories of chemicals:

(1) Fuels, consisting of single components or mixtures of kerosene, diesel, gasoline, motor gasoline, aviation gasoline (AVGAS), jet fuel (JP-4), etc.

(2) Waste/used oil alone or in combination with maintenance shop/motor pool waste (i.e., hydraulic fluid, degreasing solvent, etc.), and the potential for a variety of other solvents generated on the installation.

f. Previous Environmental Monitoring. The study by USAEHA in September 1985 was conducted to identify the contents of the 1,551 55-gallon drums of waste material stored throughout the fire training area and to recommend disposal options for the material. Of the drums sampled, only 155 were found to contain greater than 1 inch of material. Of these, 12.2 percent contained small amounts of chlorinated solvents. Also during September, another sampling and analysis study was conducted by USAEHA to evaluate the existence and extent of soil contamination caused by the use of waste oils and fuels for fire training exercises.

g. Known/Suspected Releases. Past investigations have shown traces of various chlorinated hydrocarbons to be present in one particular burn area, the fuselage of a large aircraft. The results of the USAEHA soil study identified the presence of chlorinated hydrocarbons in three samples, although no firm conclusions could be made about the level or extent of contamination. It was, therefore, recommended in the Agency report that the site be resampled.

h. Status of Site. Closed by State authorities. Closure plan being finalized. The site is currently under investigation by a private contractor hired by the U.S. Army Corps of Engineers, Kansas City District. The results of this investigation will determine the extent of remedial actions. Drums of waste material are currently being disposed of under guidelines from the State of Texas. Final closure will be coordinated by the State of Texas Water Commission.

i. Environmental Recommendations. Continue with closure and drum disposal actions currently underway, and continue coordination with State of Texas Water Commission on these actions.

j. References. 1, 5, 6, 7, 9, 10.

33. UNIT NUMBER AND NAME: FTBL-33, Raytheon Chromic Acid Pit.

a. Type of Unit. Cement Evaporation Pit.

b. Location of Unit. See Figure 5. The location of the chromic acid pit is on property leased by the Raytheon Corporation at Biggs Army Airfield. The pit is northwest of the Raytheon Building and adjacent to a long cement pad, which was the foundation for fuel tank valves.

c. Unit Description. The Raytheon Corporation used chromic acid in metal cleaning operations. The waste solution from this operation was dumped periodically into the concrete pit which was 2 feet deep by 18 inches wide by 20 feet long. Six long cracks in the pit walls were observed running below ground level allowing contents to leach into the surrounding soil. Spillage of the solution as it was being poured into the pit also caused some surface contamination. The chromic acid pit and surrounding area was cleaned up by a private contractor. The cleanup procedure meets EP Toxicity standard for chromium of less than 5 mg/L.

d. Dates of Operation. 1980 to 1983.

e. Waste Description. Chromic acid, hexavalent chromium.

f. Previous Environmental Monitoring. Preliminary scan samples were taken of the contents of the chromic acid evaporation pit and the surrounding soil surface to establish the presence and levels of contamination. Analyses performed by USAEHA laboratories in 1983 confirmed the presence of chromic acid in the soil adjacent to the pit. (The extract from a representative sample of soil contained 2,400-2,800+mg/L using the EPA EP Toxicity Test methods.) Analyses also confirmed high concentrations of hexavalent chromium (4,587 mg/g) within the pit. The contaminated area was completely defined at a later date after further sampling throughout the area by USAEHA personnel.

g. Known/Suspected Releases. As determined by sampling and analyses, the soil was contaminated with chromium to a maximum of 13,713 mg/g (Cr+6 to a level of 4,587 mg/g). A caliche layer located 6 to 7 inches below the soil surface stopped the vertical migration of contamination except where cracks developed in the evaporation pit walls below the caliche layer. The horizontal migration had been checked to the south and west by a sand ridge. In general, depth to the ground water at Fort Bliss ranges from approximately 225 feet to 315 feet below the land surface.

Therefore, ground-water contamination by the chromium waste is not expected.

h. Status of Site. This site will be closed as a Texas Class I Hazardous Waste Site by FTBL in conjunction with the Texas Water Commission. Closure should be completed by November 1987.

i. Environmental Recommendations. Continue with closure of site in conjunction with the Texas Water Commission.

j. References. 1, 4, 7.

34. UNIT NUMBER AND NAME: FTBL-34, Raytheon 90-Day Hazardous Waste Storage Facility.

- a. Type of Unit. Hazardous Waste Storage Facility.
- b. Location of Unit. See Figure 5.
- c. Unit Description. This storage facility has two covered and bermed concrete pads surrounded by a chain link fence. The pads are of epoxy-sealed concrete and have a 6-inch berm.
- d. Dates of Operation. 1985 to present.
- e. Waste Description. Hazardous wastes including ignitables, toxics, and corrosives.
- f. Previous Environmental Monitoring. None.
- g. Known/Suspected Releases. None.
- h. Environmental Recommendations. None.
- i. Reference. R. Nickolas Jr.

35. FTBL-35: EVAPORATION AREA FOR CHROMIC ACID SOLUTION

DESCRIPTION

Unit Type: This unit is a waste treatment unit located at Biggs Army Airfield at the current site of SWMU #34 (Raytheon 90-Day Hazardous Waste Storage Area).

Purpose of Unit: This unit was used for evaporation of chromic acid solution from Raytheon metal cleaning operations.

Regulatory Status: This unit was an unpermitted waste treatment unit.

Period of Operation: Unknown to 1982.

Dimensions/Volume: Several metal drums were cut in half lengthwise and placed along the ground.

Material of Construction: Containers were 55-gallon steel drums.

Underlain By: ☐ Concrete ☐ Asphalt ☒ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: No other information on this unit was available.

CLOSURE INFORMATION

☐ Active  
☐ Inactive/Physically Present  
☒ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

WASTES MANAGED

<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input checked="" type="checkbox"/> Toxic	

Particulars: Chromic acid solution.

Sources of Wastes: The waste was generated during Raytheon metal cleaning operations.

Disposition of Waste: Solution was evaporated. Disposition of residue is unknown.

RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls known.

MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted at this unit.

RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: Since this unit has been dismantled and is no longer present, no releases were noted during the VSI.



Detail of Past Releases: No past releases from this unit are known, however spillage and leakage is likely to have occurred.

RELEASE POTENTIAL

Air	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown
Soil/Groundwater	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown
Surface Water	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown
Subsurface Gas Generation	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Unknown

Detail of Release Potential: There is no documentation of spills or releases from this unit, however spills may have occurred. Insufficient information about this unit was available to properly evaluate the potential for release.

36. FTBL-36: WASTE ACCUMULATION AREA - BLDG. 11108

DESCRIPTION

Unit Type: This unit is a small waste accumulation area south of Building 11108, the Maintenance Hangar.

Purpose of Unit: This unit is used for storage of waste oil, paint, and other waste materials generated during helicopter maintenance activities.

Regulatory Status: Non-RCRA regulated.

Period of Operation: 1987 to present.

Dimensions/Volume: This unit is about 15 feet by 6 feet in size.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☒ Covered ☐ Residences ☐ Below Ground

Details: This unit is a small, fenced, concrete storage unit with 6-inch curbs on all sides. The unit is covered. Drums sit on pallets within the curbed area.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<u>  X  </u> Solids	<u>  X  </u> Corrosive	<u>  X  </u> Organics
<u>  X  </u> Liquids	<u>  X  </u> Flammable	<u>  X  </u> Inorganics
<u>      </u> Gases	<u>      </u> Reactive	<u>  X  </u> Metals
<u>      </u> Sludges	<u>  X  </u> Toxic	

Particulars: During the VSI, wastes observed in this unit included paint-related waste (cleaning compound) and cans of acetone, methanol, and paint with expired shelf lives.

Sources of Wastes: The source of wastes is Building 11108, the helicopter maintenance hangar.

Disposition of Waste: Wastes are transport to DRMO for storage at the Hazardous Waste Storage Facility (SWMU #30) or for disposal offsite.

#### RELEASE CONTROLS

<u>      </u> Liner	<u>  X  </u> Diking	<u>      </u> Ind. Sewer
<u>      </u> Level Controls	<u>      </u> Overflow Controls	
<u>      </u> Leak Detection	<u>      </u> Other	

Details: The unit is surrounded by a concrete curb.

#### MONITORING

<u>      </u> Monitoring Wells	<u>      </u> Downgradient Wells
<u>      </u> Upgradient Wells	<u>      </u> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

#### RELEASE HISTORY

<u>      </u> Past Release to Air	<u>      </u> VSI Noted Release to Air
<u>      </u> Past Release to Soil/GW	<u>      </u> VSI Noted Release to Soil/GW
<u>      </u> Past Release to SW	<u>      </u> VSI Noted Release to SW
<u>      </u> Past Release to SSG	<u>      </u> VSI Noted Release to SSG

VSI Noted Release Conditions: No releases were observed during the VSI.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Because this unit is adequately contained and there is no evidence of past leakage, the potential for release to the environment is low.

37. FTBL-37: WASTE POL TANK NEAR BLDG. 11108

DESCRIPTION

Unit Type: This unit is a waste storage tank located south of Building 11108.

Purpose of Unit: This unit is used to store waste petroleum, oil, and lubricants generated in the helicopter maintenance hangar (Building 11108). A contractor periodically removes the contents of this tank.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: Tank is a 300-gallon horizontal steel tank.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☒ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: This unit is situated on a concrete pad over a gravel surface. Bags of sand have been placed around the tank as a berm.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Wastes stored in this tank include waste oil from aircraft engines and transmissions. Cleaning solvents (which contain hazardous constituents) are also placed in this tank.

Sources of Wastes: The source of wastes is maintenance activities conducted in Building 11108.

Disposition of Waste: Waste POL materials are removed periodically by an outside contractor for recycling or disposal.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input checked="" type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: The tank is surrounded by bags of sand used as a berm.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: Some staining of the gravel under the tank was observed during the VSI.

Detail of Past Releases: No information of past releases was available.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>      </u> Medium	<u>  X  </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since the tank is underlain by gravel and surrounded only by a sandbag berm, and because some staining was observed during the VSI, a high potential for releases to soil exists at this unit.

38. FTBL-38: VEHICLE FUELING AREA SUMP

DESCRIPTION

Unit Type: This unit is a blind sump located at a vehicle fueling area south of Building 11108.

Purpose of Unit: The unit is used to collect spills which may occur during vehicle fueling from two underground storage tanks.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: The sump is approximately 5 feet by 8 feet by 10 feet deep.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☒ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The sump is constructed of concrete.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)



### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Waste fuel from underground storage tanks. The sump has reportedly never been used.

Sources of Wastes: The source of waste is spilled fuel from the two 20,000-gallon underground storage tanks.

Disposition of Waste: Waste fuels are pumped out as necessary; final disposition is unknown.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: No releases were observed during the VSI. The sump was dry and contained much debris (leaves, trash, etc.) (Ref. 100).

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>X</u>	Low	_____	Medium	_____	High
Soil/Groundwater	<u>X</u>	Low	_____	Medium	_____	High
Surface Water	<u>X</u>	Low	_____	Medium	_____	High
Subsurface Gas Generation	<u>X</u>	Low	_____	Medium	_____	High

Detail of Release Potential: Since this unit appears to be used very infrequently if at all, and no evidence of any releases was observed during the VSI, there is a low potential for any environmental releases.

39. UNIT NUMBER AND NAME: FTBL-39, Oxidation Lagoon (NCO Academy).

a. Type of Unit. Oxidation Lagoon (spill).

b. Location of Unit. See Figure 5. This site is east of the NCO Academy which is housed in the former disciplinary barracks.

c. Unit Description. The pond is approximately 15 feet deep and covers a square area of about 4 acres. The lagoons are unlined. Brown stains and fuel filters are present in the lagoon.

d. Dates of Operation. 1960 to present.

e. Waste Description. Domestic wastewater and waste from fuel tank purging is generated (2-gallon purging solution plus 5,000 gallons of water) three to four times per year. Fuel dumping has also occurred in the past.

f. Previous Environmental Monitoring. None.

g. Known/Suspected Releases. Five- to ten-thousand gallon spill of contaminated fuel. The lagoons are unlined; therefore, a potential for ground-water contamination exists.

h. Environmental Recommendations. Sample soil to determine penetration depth of fuel spill and whether any hazardous constituents were contained in fuel. Following testing for depth of contamination and hazardous constituents, remedial actions should be coordinated with the State of Texas.

i. Reference. R. Nickolas Jr.

40. UNIT NUMBER AND NAME: FTBL-40, Pathological Incinerator.

a. Type of Unit. Pathological Incinerator.

b. Location of Unit. See Figure 6. Building S7265.

c. Unit Description. Pathological, Natural Gas Incinerator. Volume of waste generated per day is approximately 20 lbs.

d. Dates of Operation. 1986 to ongoing.

e. Waste Description. Animal carcasses and human limbs, (glass implements present during site visit). Infectious waste disposed of in Landfill No. 1.

f. Previous Environmental Monitoring. Air monitoring: The incinerator was within Texas air quality standards for an opacity test conducted during 1986.

g. Known/Suspected Releases. Ash disposed of at sanitary landfill.

h. Environmental Recommendations. None.

i. Reference. R. Nickolas Jr.

41. FTBL-41. WASTE ACCUMULATION AREA - ROOM 3J3

DESCRIPTION

Unit Type: This unit is a waste accumulation area located in the William Beaumont Army Medical Center.

Purpose of Unit: This unit is used to store spent xylene and other wastes prior to transfer to the DRMO storage area (SWMU #30) or offsite disposal.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: This unit is a small room, about 20 feet by 12 feet in size.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☒ Indoors ☐ Near Surface Water ☐ In Ground  
☐ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The unit is a small room with a concrete floor and sprinklers; the room is fireproof and bombproof.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

## WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input checked="" type="checkbox"/> Toxic	

Particulars: At the time of the VSI, about 40 gallons of spent xylene in 5-gallon cans was stored in this unit; these wastes had been stored for up to six months while the xylene still (SWMU #42) was in maintenance. In addition, the unit contained mercuric thiocyanate waste used for chloride determination in blood or urine; several small plastic containers containing waste mercuric thiocyanate were observed (Ref. 100).

Sources of Wastes: Xylene is generated at the Medical Center, where it is used as a clearing agent (to dry tissue) for the Histology Department.

Disposition of Waste: These wastes are transferred to DRMO periodically for storage (SWMU #30) or offsite disposal.

## RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: Unit is located inside a locked room.

## MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<u>      </u> Past Release to Air	<u>      </u> VSI Noted Release to Air
<u>      </u> Past Release to Soil/GW	<u>      </u> VSI Noted Release to Soil/GW
<u>      </u> Past Release to SW	<u>      </u> VSI Noted Release to SW
<u>      </u> Past Release to SSG	<u>      </u> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

### RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since this unit is located indoors with adequate release controls, the release potential to all media is low.

42. FTBL-42: XYLENE STILL

DESCRIPTION

Unit Type: This unit is a waste treatment unit located inside William Beaumont Army Medical Center.

Purpose of Unit: The unit is used to recycle spent xylene generated by the Histology Department.

Regulatory Status: Not regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: This unit is a small refractory column about 3 feet in height by 2 feet by 2 feet.

Material of Construction: The unit is constructed of glass.

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☒ Indoors ☐ Near Surface Water ☐ In Ground  
☐ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The unit is located indoors in the Medical Center; the still is normally run about three times per week, which generates about five gallons of xylene per week.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)



### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Spent xylene.

Sources of Wastes: William Beaumont Army Medical Center - Histology Department.

Disposition of Waste: Still bottoms (F003 wastes), which are a solid paraffin, are placed in a biohazard bag and are reportedly disposed of at SWMU No. 1, the sanitary landfill (Ref. 19, 100). The light ends from the distillation process are reportedly alcohols; these materials are poured down the drain to the sanitary sewer system (Ref. 100).

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls, however the unit is located inside a building.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: No releases noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Because this unit is located inside a building, and because there is no evidence of past releases, the potential for ongoing environmental releases from this unit is low.

43. FTBL-43: DUMPSTERS FOR BIOHAZARDOUS WASTE

DESCRIPTION

Unit Type: This SWMU is a waste storage unit located at the William Beaumont Army Medical Center.

Purpose of Unit: This unit is used to store biohazardous wastes prior to disposal at the sanitary landfill (SWMU #1).

Regulatory Status: Not regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: Unknown, but believed to be the size of standard dumpsters, about 5 feet by 10 feet by 6 feet.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: No other details were available.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Wastes include autoclave cultures and media, xylene still bottoms, and other biohazardous wastes.

Sources of Wastes: Wastes are generated through a variety of hospital and research activities.

Disposition of Waste: Biohazardous wastes are placed in the sanitary landfill with asbestos wastes. For disposal, a pit is dug each day, then material is placed in it and covered (Ref. 100).

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since all wastes in this unit are stored in plastic bags, and given the solid nature of the wastes, the release potential for all media is low.

44. FTBL-44: SANITARY SEWER SYSTEM

DESCRIPTION

Unit Type: This unit is the Main Cantonment sanitary sewer system.

Purpose of Unit: This unit is used to collect wastewaters from throughout the main post for transport to the El Paso municipal wastewater treatment plant.

Regulatory Status: Unregulated.

Period of Operation: Unknown to present. This unit has likely been in operation for many years.

Dimensions/Volume: Unknown.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☒ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☒ Below Ground

Details: Sanitary sewer pipes collect wastewater from throughout the post; they are primarily underground. Materials of construction are unknown. No information on integrity testing of sewer piping was available.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### MANAGED

<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input checked="" type="checkbox"/> Toxic	

Particulars: In addition to sanitary wastes, the EPA allows generators to dispose of certain acute hazardous waste into the sanitary sewer if they are generated at less than 5 kg per month and are appropriately diluted by nonhazardous substances. These may include acetonitrile, acetate buffer, methylene chloride, and other substances (Ref. 100). A monthly report listing items disposed in the sanitary sewer system is generated. In addition, light ends from the xylene still (SWMU #42) and wastewater from motor pool drains, oil/water separators, and/or wash racks may also be placed in the sanitary sewers. Improper neutralization of waste battery acid from a lead-lined tank (see SWMU No. 54) may have resulted in the disposal of large quantities of lead into the sanitary sewer system.

Sources of Wastes: Sources of waste include the William Beaumont Army Medical Center, the motor pools, and all other areas of the post.

Disposition of Waste: Wastes are piped to the El Paso municipal wastewater treatment plant.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls known.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No onsite monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

### RELEASE POTENTIAL

Air	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High
Soil/Groundwater	<input type="checkbox"/> Low	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> High
Surface Water	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High
Subsurface Gas Generation	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High

Detail of Release Potential: Given the age of this unit (probably at least 50 years old) and the disposal of corrosive and toxic materials, the potential for releases to soil is considered to be moderate.



45. FTBL-45: STORM DRAINAGE SYSTEM

DESCRIPTION

Unit Type: This unit is a series of ditches and ponds located throughout the main post and Biggs Army Airfield.

Purpose of Unit: The purpose of this unit is to collect storm drainage from the main post and Biggs Army Airfield.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: Storm ditches are generally about 5 feet wide and 4 feet deep; evaporation ponds range in volume from several thousand gallons to several million gallons.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☒ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Some of the storm ditches are paved with many cracks; others are unpaved. The surface impoundments or ponds are unlined and covered with grass and other vegetation. One surface impoundment, designed to retain 100-year floodwaters, is reportedly used during training exercises for tank and other vehicle movement.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: This unit may contain fuels, oils, and other materials washed off the pavement throughout the post. In addition, wash racks and possibly oil/water separators from throughout Fort Bliss may drain to the storm ditches.

Sources of Wastes: These wastes may come from throughout the main cantonment and Biggs Army Airfield areas.

Disposition of Waste: Since the stormwater in this unit evaporate, this unit is considered final disposal.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted at this unit.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>  X  </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Given the low concentration of hazardous constituents contained in this unit, the release potential to soil is judged to be moderate.

46. FTBL-46: MOTOR POOL WASTE ACCUMULATION AREAS

DESCRIPTION

Unit Type: This unit consists of a large number of waste accumulation areas. Several of these areas were observed during the VSI.

Purpose of Unit: This unit is used for the accumulation of wastes generated at motor pools throughout the main cantonment area. Although there may be several hundred waste accumulation areas, there are only about 10 that accumulate hazardous wastes.

Regulatory Status: Not regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: These accumulation areas are typically about 10 feet by 10 feet in size.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☒ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: In general, motor pool waste accumulation areas are uncovered. Drums of wastes are placed on pallets on gravel or concrete pads. Most are surrounded by sand bag berms, although a few have concrete berms.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Wastes managed are primarily used oils and solvents.

Sources of Wastes: Vehicle maintenance and fueling activities at motor pools.

Disposition of Waste: Wastes are transported to DRMO for offsite recycling or disposal.

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input checked="" type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: Sand bag berms were present around most units.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input checked="" type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: Obvious releases to soil have occurred at this unit; staining was observed in many locations.

Detail of Past Releases: No information on past releases was available.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>      </u> Medium	<u>  X  </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since releases were observed during the VSI, there is a high potential for ongoing releases from these units.

47. FTBL-47: GREASE RACKS

DESCRIPTION

Unit Type: This unit consists of numerous grease racks located throughout the main cantonment area. Several of these racks were observed during the VSI.

Purpose of Unit: The purpose of this unit is to collect grease and other wastes during vehicle maintenance activities.

Regulatory Status: Not regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: The grease racks are generally about 2 feet by 10 feet by 3 feet deep, and are underlain by a blind sump.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☒ Indoors ☐ Near Surface Water ☒ In Ground  
☐ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The grease racks are primarily indoors, and constructed of concrete.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Wastes managed are primarily grease, oils, and other materials generated during vehicle maintenance.

Sources of Wastes: Motor pools.

Disposition of Waste: Unknown.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: Wastes are collected in a blind sump at the bottom of the grease rack.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG



VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since the grease racks are indoors and are encased in concrete, there is little potential for environmental releases from this unit.

48. FTBL-48: OTHER WASTE ACCUMULATION AREAS

DESCRIPTION

Unit Type: This unit consists of a number of non-motor pool waste accumulation areas, including the paint shop and battery shop accumulation areas located in the main cantonment area.

Purpose of Unit: This unit is used to collect and store temporarily wastes generated during various activities on the main post, including painting, battery maintenance, and other shop activities.

Regulatory Status: Not regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: Waste accumulation areas are generally about 10 feet by 10 feet in size.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: These accumulation areas are generally on curbed concrete pads. They are fenced and covered. Several additional accumulation areas were observed which consisted of small waste oil tanks or drums of solvents on wooden pallets and surrounded by sand bag berms.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input checked="" type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input checked="" type="checkbox"/> Toxic	

Particulars: Wastes managed may include solvents, paint-related wastes, and other industrial chemicals.

Sources of Wastes: Shop activities located throughout the main cantonment area.

Disposition of Waste: Wastes are transferred to DRMO for offsite recycling or disposal.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input checked="" type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: The accumulation areas are curbed and covered, although at least one of these has reportedly flooded during heavy rainfall (Ref. 100). Some areas are surrounded only by sand bag berms and are uncovered.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input checked="" type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: Some staining of the ground surface around the accumulation areas was observed during the VSI.

Detail of Past Releases: No information on past releases was available.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>  X  </u> Medium	<u>  X  </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since evidence of releases to soil was observed during the VSI, the potential for ongoing releases is judged to be moderate to high.

49. FTBL-49: OILY DITCHES NEAR VEHICLE MAINTENANCE AREA -  
BLDG. 1248

DESCRIPTION

Unit Type: Shallow ditches along storm sewer system that are unlined and vegetated. Oil at one time was allowed to drain to this ditch (Ref. 100).

Purpose of Unit: To drain runoff to ponding area through storm sewer system. Oily waste from the old steam cleaner was allowed to drain to this ditch (Ref. 100).

Regulatory Status: Unregulated.

Period of Operation: Prior to 1985 (unknown exact time period) (Ref. 100).

Dimensions/Volume: Ditch is 2 to 3 feet deep and about 6 feet wide; oily waste (and water) would flow east in the ditch for an unknown distance.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☒ Soil

Environmental: ☐ Indoors ☒ Near Surface Water ☐ In Ground  
☒ Outdoors ☒ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Ditch is unlined and vegetated by grass on soil; located about 550 feet northwest of a Fort Bliss water supply well.

CLOSURE INFORMATION

☐ Active  
☒ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Waste materials include oily waste from steam cleaner (Ref. 100).

Sources of Wastes: Steam cleaner (Bldg. 1248) that used to drain to ditch. Building was replaced in 1985 (Ref. 100).

Disposition of Waste: Prior to 1985, waste was allowed to run to ditches and infiltrate soil or drain through storm sewer system to ponding area (Ref. 100).

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: Waste material was confined to ditch.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input checked="" type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: Steam cleaner at the Vehicle Maintenance Area was allowed to drain its oily waste to the adjacent storm sewer. Building is now replaced with a Wash Area Building installed with an oil/water separator (Ref. 100).

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>      </u> Low	<u>      </u> Medium	<u>  X  </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: The current release potential is very low because the steam cleaning building has been removed and the new Wash Area Building is rarely used and is equipped with an oil/water separator (Ref. 100). Past releases may have contaminated soil, but great depth to water table reduces the potential for groundwater contamination.

50. UNIT NUMBER AND NAME: FTBL-50, Pesticide Storage and Mixing Area, Butler Buildings 60-36 and 60-276.

- a. Type of Unit. Pesticide Storage and Mixing Area.
- b. Location of Unit. See Figure 4.
- c. Unit Description. Pesticide storage and mixing area, Buildings 60-36 and 60-276. The site has a 1 square yard concrete basin with a 2-inch berm which is used as the mixing area.
- d. Dates of Operation. 1982 to 1983.
- e. Waste Description. Chlordane, diazinon, malathion, baygon (fenthion), dursban, avitrol, Gold Crest C-100, rat bait, roach killer, snailcide and DDT.
- f. Previous Environmental Monitoring. During a January 1983 Hazardous Waste Management Survey conducted by USAEHA, an ongoing spill problem was identified outside the pesticide mixing area. Soil surface samples taken at the time of the survey were analyzed by USAEHA and revealed concentrations of the waste pesticides mentioned above.
- g. Known/Suspected Releases. Soil contamination from waste pesticides is evident from the results of the sample analyses; however, the extent is not yet known. The highest level of pesticide found was 77.9 ppm of metabolized chlordane.
- h. Status of Site. Ongoing. No cleanup performed.
- i. Environmental Recommendations. Develop a soil sample and analysis plan to further identify the extent of contamination.
- j. Reference. 7.



51. PTBL-51: PESTICIDE STORAGE/MIXING AREA - BLDG 1235

DESCRIPTION

Unit Type: Small stone building used for storing and rinsing pesticides. Located on Pike Road west of Pleasonton Road near Locomotive Shelter.

Purpose of Unit: To store and rinse pesticides.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown.

Dimensions/Volume: Stone building is about 15 by 15 feet and 10 feet high.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☒ Indoors ☐ Near Surface Water ☐ In Ground  
☐ Outdoors ☒ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: In stone building with shingled, vented roof. Floor inside is concrete with central floor drain that is supposedly plugged. Located 600 feet northwest of Fort Bliss supply well.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Material known to be stored includes Malathion (5-gallon containers), but also smaller containers and aerosol cans of unknown materials. Containers are triple rinsed, punctured, crushed and sent to the active landfill. The rinsate reportedly is put into applicators to be used; there were obvious stains on the concrete from apparent spills (Ref. 100).

Sources of Wastes: From stored pesticides.

Disposition of Waste: Waste rinsate is either reused in the applicators or is/was sent to the floor drain.

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: Releases flow to the floor drain in the center of the building. This drains to an unknown sewer system.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: Monitoring has not been conducted.

## RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted, but floor showed stains.

Detail of Past Releases: Floor drain at one time drained liquid from this building to an unknown location, but it apparently became plugged (Ref. 100).

## RELEASE POTENTIAL

Air	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High
Soil/Groundwater	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High
Surface Water	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High
Subsurface Gas Generation	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High

Detail of Release Potential: Primary source of potential releases would be through the floor drain, and possibly to the storm sewer system and ponding areas (SWMU #45).

52. FTBL-52: SPENT BATTERY ACID STORAGE AREA.

DESCRIPTION

Unit Type: This unit is a waste storage area located outside of Building 2515, the Battery Shop.

Purpose of Unit: This unit is used for storage of spent battery acid prior to transport to DRMO for further storage (SWMU #30) or offsite disposal.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: The spent battery acid storage area is about 30 feet by 20 feet in size.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Drums are stored on pallets on a concrete pad. The waste battery acid drums are surrounded by a sand bag berm.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<u>X</u> Solids	<u>X</u> Corrosive	<u>      </u> Organics
<u>X</u> Liquids	<u>      </u> Flammable	<u>X</u> Inorganics
<u>      </u> Gases	<u>      </u> Reactive	<u>X</u> Metals
<u>      </u> Sludges	<u>X</u> Toxic	

Particulars: Wastes stored at this unit include waste battery fluid (D002) and contaminated soil from drip pans at the battery charging area (SWMU #53).

Sources of Wastes: Battery Shop, Building 2515.

Disposition of Waste: Waste battery acid is transported to the DRMO hazardous waste storage facility (SWMU #30) for storage prior to offsite disposal. Contaminated soil is placed in the sanitary landfill (SWMU #1).

### RELEASE CONTROLS

<u>      </u> Liner	<u>      </u> Diking	<u>      </u> Ind. Sewer
<u>      </u> Level Controls	<u>      </u> Overflow Controls	
<u>      </u> Leak Detection	<u>      </u> Other	

Details: No release controls.

### MONITORING

<u>      </u> Monitoring Wells	<u>      </u> Downgradient Wells
<u>      </u> Upgradient Wells	<u>      </u> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<u>      </u> Past Release to Air	<u>      </u> VSI Noted Release to Air
<u>      </u> Past Release to Soil/GW	<u>      </u> VSI Noted Release to Soil/GW
<u>      </u> Past Release to SW	<u>      </u> VSI Noted Release to SW
<u>      </u> Past Release to SSG	<u>      </u> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted, although there were some stains on the concrete.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>X</u> Low	_____ Medium	_____ High
Soil/Groundwater	<u>X</u> Low	_____ Medium	_____ High
Surface Water	<u>X</u> Low	_____ Medium	_____ High
Subsurface Gas Generation	<u>X</u> Low	_____ Medium	_____ High

Detail of Release Potential: Since this unit is located on a concrete pad with a berm around the battery acid storage drums, and there was no evidence of releases observed during the VSI, the release potential to all media is considered to be low.

53. FTBL-53: DRIP PANS AT BATTERY CHARGING AREA

DESCRIPTION

Unit Type: This unit consists of a series of drip pans located inside Building 2515 and under the battery charging area.

Purpose of Unit: This unit is filled with soil and is used to contain drips of battery acid which occur during battery charging.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Unknown to present.

Dimensions/Volume: The drip pans are several feet long by about 2 feet wide and 4 or 5 inches tall.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☒ Indoors ☐ Near Surface Water ☐ In Ground  
☐ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The pans appear to be constructed of steel. They sit on racks under the battery charging tables in Building 2515.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

WASTES MANAGED

<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input checked="" type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: This unit collects waste battery acid (sulfuric acid) (Ref. 100).

Sources of Wastes: Battery Shop - Building 2515.

Disposition of Waste: Soil is removed from the pans about once per year and placed in drums. These drums are then placed in the sanitary landfill (SWMU #1).

RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG



VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since this unit is located inside a building, and the contaminants are not volatile, the release potential to all media is judged to be low.

54. FTBL-54: FORMER NEUTRALIZATION TANK

DESCRIPTION

Unit Type: This unit is a lead-lined, open-top, treatment tank located outside of Building 2515, the Battery Shop. While it was in use, it was located inside Building 2515.

Purpose of Unit: This unit was used to neutralize waste acid prior to disposal in the sanitary sewer system. Neutralization was reportedly conducted improperly (Ref. 100).

Regulatory Status: Not regulated (elementary neutralization tank).

Period of Operation: Unknown to November 1982.

Dimensions/Volume: The tank is about 4 feet by 12 feet and 3 feet deep.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☒ Indoors ☐ Near Surface Water ☐ In Ground  
☐ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: Tank is made of lead-lined steel, and was located inside the building.

CLOSURE INFORMATION

☐ Active  
☐ Inactive/Physically Present  
☒ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

WASTES MANAGED

<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Waste battery fluid (D002).

Sources of Wastes: Battery shop - Building 2515.

Disposition of Waste: Sanitary sewer system (SWMU #44).

RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted; this unit is no longer active.

Detail of Past Releases: Releases to the sanitary sewer system of improperly neutralized acid reportedly occurred (Ref. 100).

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since this unit has been removed from service, there is low potential for releases from this unit.

55. FTBL-55: CHEMICAL SUMP AT BATTERY SHOP

DESCRIPTION

Unit Type: This unit is a treatment sump. It is located outside of Building 2515.

Purpose of Unit: The chemical sump is used for treatment of Battery Shop wastewaters.

Regulatory Status: Non-RCRA regulated.

Period of Operation: Summer 1988 to present.

Dimensions/Volume: The sump is about 3 feet by 4 feet in size and about 4 feet deep.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☒ Below Ground

Details: The sump is constructed of treated concrete. No other details were available.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Washwaters from the Battery Shop.

Sources of Wastes: Battery Shop - Building 2515.

Disposition of Waste: The wastewater is neutralized with sodium then pumped to the sanitary sewer system.

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Since the tank is very new, constructed of concrete, and no releases have been reported or observed, the potential for ongoing releases from this unit are considered to be low.

56. FTBL-56: BIRD BATH

DESCRIPTION

Unit Type: This unit is used for collection of wastewater; it is located on the northeast edge of the main cantonment area.

Purpose of Unit: This unit is used for cleaning of tanks and other vehicles.

Regulatory Status: Non-RCRA regulated.

Period of Operation: July 1988 to present.

Dimensions Volume: The volume of this unit is about 75,000 gallons.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: This unit is constructed of concrete, with steel piping along the bottom of the unit. The unit is filled with water, then vehicles drive slowly through the unit, bouncing over the pipes. This is repeated several times. High pressure hoses on either side are used to further clean mud, grease, oil, etc. from the vehicles.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)



#### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Wastes include dirt, oil, and grease.

Sources of Wastes: Washing of vehicles, especially tanks.

Disposition of Waste: Wastes are pumped to the primary sedimentation tanks (SWMU #S7).

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No release controls.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Given the low concentration of hazardous constituents in this unit, and since it is constructed of concrete and above-ground, release potential is judged to be low.

57. FTBL-57: PRIMARY SEDIMENTATION TANKS

DESCRIPTION

Unit Type: This unit consists of two treatment tanks located adjacent to SWMU #56 (above).

Purpose of Unit: The purpose of this unit is to allow for primary settling of particulate materials collected in the bird bath. Normally one tank is in operation; the second is standby. There is an oil skimmer on each tank to remove floating oil.

Regulatory Status: Non-RCRA regulated.

Period of Operation: August 1988 to present.

Dimensions/Volume: The sedimentation tanks are about 200 feet by 50 feet in size. They are 20 feet deep at one end, and are tapered to the other end.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: These units are concrete rectangular tanks.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Wastes include dirt, oil, and grease.

Sources of Wastes: Bird bath (SWMU #56).

Disposition of Waste: Oil is skimmed into the waste oil holding tanks (SWMU #58), while wastewater overflows pumped to the sedimentation pond (SWMU #59).

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: Release controls are not known.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted at this facility.

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>X</u> Low	_____ Medium	_____ High
Soil/Groundwater	<u>X</u> Low	_____ Medium	_____ High
Surface Water	<u>X</u> Low	_____ Medium	_____ High
Subsurface Gas Generation	<u>X</u> Low	_____ Medium	_____ High

Detail of Release Potential: Given the low concentration of hazardous constituents in this unit, and because this unit is constructed of concrete and is above-ground, release potential is judged to be low.

58. FTBL-58: WASTE OIL HOLDING TANKS

DESCRIPTION

Unit Type: This unit consists of two steel holding tanks, located on either side of the primary sedimentation tanks.

Purpose of Unit: This unit is used to hold waste oil skimmed from the top of the primary sedimentation tanks (SWMU #57).

Regulatory Status: Non-RCRA regulated.

Period of Operation: August 1988 to present.

Dimensions/Volume: The tanks are approximately 1000 gallons each; at the time of the VSI, the tank inspected was about one-third full.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: The tanks are constructed of steel.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

#### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input checked="" type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Waste oily materials.

Sources of Wastes: Primary sedimentation tanks (SWMU #57).

Disposition of Waste: Transported to the DRMO for disposal.

#### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input checked="" type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: The tanks site in a concrete curbed area.

#### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

#### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Given the low concentration of hazardous constituents in this unit, and since it is constructed of concrete and situated above-ground, release potential is judged to be low.



RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Given the low concentration of hazardous constituents in this unit, and because the unit is lined with heavy plastic, release potential is judged to be low.

60. FTBL-60: WASTEWATER HOLDING TANK

DESCRIPTION

Unit Type: This unit is a wastewater holding tank located near the bird bath (SWMU #56).

Purpose of Unit: This unit is used as an additional settling tank in the bird bath wastewater treatment. When the tank fills, it flushes to the sand filters (SWMU #61).

Regulatory Status: Non-RCRA regulated.

Period of Operation: August 1988 to present.

Dimensions/Volume: The tank has a volume of 220,000 gallons; it is 74 feet in diameter and 8 feet deep.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☐ In Ground  
☒ Outdoors ☐ Near Drinking Water ☒ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: This unit is a steel tank sitting on a concrete pad.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Bird bath wastewater.

Sources of Wastes: Sedimentation pond (SWMU #59).

Disposition of Waste: Sand filters (SWMU #61).

### RELEASE CONTROLS

<input type="checkbox"/> Liner	<input type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input checked="" type="checkbox"/> Other	

Details: No secondary containment. When tank fills, however, it flushes to the sand filters.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

# RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Given the low concentration of hazardous constituents in this unit, and since this unit is constructed of steel, on a concrete pad, and above-ground, release potential is judged to be low.

61. FTBL-61: SAND FILTERS

DESCRIPTION

Unit Type: This unit consists of two wastewater treatment ponds.

Purpose of Unit: The purpose of this unit is to filter wastewater as part of the bird bath wastewater treatment. The sand filters are used alternately (one active, one in standby).

Regulatory Status: Non-RCRA regulated.

Period of Operation: August 1988 to present.

Dimensions/Volume: These ponds are about 100 feet by 50 feet; the ponds are sloped downward to the north.

Material of Construction:

Underlain By: ☐ Concrete ☐ Asphalt ☒ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☒ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: No other details available.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)

WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Bird bath wastewaters.

Sources of Wastes: Wastewater holding tank (SWMU #60).

Disposition of Waste: Final sedimentation tank (SWMU #62).

RELEASE CONTROLS

<input checked="" type="checkbox"/> Liner	<input checked="" type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No other details available.

MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Given the low concentration of hazardous constituents in this unit, release potential is judged to be low.

62. FTBL-62: FINAL SEDIMENTATION TANK

DESCRIPTION

Unit Type: This unit is a holding pond for treated wastewater from the bird bath (SWMU #56).

Purpose of Unit: The tank is used for final sedimentation of bird bath wastewaters. Water in this tank is then pumped to the bird bath for reuse.

Regulatory Status: Non-RCRA regulated.

Period of Operation: August 1988 to present.

Dimensions/Volume: Unknown.

Material of Construction:

Underlain By: ☒ Concrete ☐ Asphalt ☐ Gravel  
☐ Grass ☐ Soil

Environmental: ☐ Indoors ☐ Near Surface Water ☒ In Ground  
☒ Outdoors ☐ Near Drinking Water ☐ Above Ground  
☐ Covered ☐ Residences ☐ Below Ground

Details: This unit is constructed of concrete and is lined with heavy plastic.

CLOSURE INFORMATION

☒ Active  
☐ Inactive/Physically Present  
☐ Inactive/Removed or Dismantled  
☐ Closed Under State or EPA  
☐ Other (Closed without an approved closure plan)



### WASTES MANAGED

<input type="checkbox"/> Solids	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Organics
<input checked="" type="checkbox"/> Liquids	<input type="checkbox"/> Flammable	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Gases	<input type="checkbox"/> Reactive	<input type="checkbox"/> Metals
<input type="checkbox"/> Sludges	<input type="checkbox"/> Toxic	

Particulars: Treated wastewater.

Sources of Wastes: Sand filters (SWMU #61).

Disposition of Waste: Reuse in the bird bath (SWMU #56).

### RELEASE CONTROLS

<input checked="" type="checkbox"/> Liner	<input checked="" type="checkbox"/> Diking	<input type="checkbox"/> Ind. Sewer
<input type="checkbox"/> Level Controls	<input type="checkbox"/> Overflow Controls	
<input type="checkbox"/> Leak Detection	<input type="checkbox"/> Other	

Details: No other details were available.

### MONITORING

<input type="checkbox"/> Monitoring Wells	<input type="checkbox"/> Downgradient Wells
<input type="checkbox"/> Upgradient Wells	<input type="checkbox"/> Surface Water Monitoring

Monitoring Frequency: No monitoring has been conducted.

### RELEASE HISTORY

<input type="checkbox"/> Past Release to Air	<input type="checkbox"/> VSI Noted Release to Air
<input type="checkbox"/> Past Release to Soil/GW	<input type="checkbox"/> VSI Noted Release to Soil/GW
<input type="checkbox"/> Past Release to SW	<input type="checkbox"/> VSI Noted Release to SW
<input type="checkbox"/> Past Release to SSG	<input type="checkbox"/> VSI Noted Release to SSG

VSI Noted Release Conditions: None noted.

Detail of Past Releases: None known.

RELEASE POTENTIAL

Air	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Soil/Groundwater	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Surface Water	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High
Subsurface Gas Generation	<u>  X  </u> Low	<u>      </u> Medium	<u>      </u> High

Detail of Release Potential: Given the low concentration of hazardous constituents in this unit, release potential is judged to be low.

63. UNIT NUMBER AND NAME: FTBL-63, Herbicide Storage Building No. 11160.

a. Type of Unit. Herbicide Storage Building.

b. Location of Unit. See Figure 5.

c. Unit Description. Building 11160 has been used to store more than 25 different herbicides. There was evidence of spilled herbicides inside the building on a wooden floor which was in poor condition.

d. Dates of Operation. Unknown.

e. Waste Description. Spilled herbicides.

f. Previous Environmental Monitoring. None known.

g. Known/Suspected Releases. Possible leakage of spilled herbicides through the interior floor or at the loading dock.

h. Environmental Recommendations. Identify the type and extent of contamination in soil beneath the building.

i. Reference. 23.

64. UNIT NUMBER AND NAME: FTBL-64, Dona Ana Oxidation Lagoon.

- a. Type of Unit. Oxidation Lagoon.
- b. Location of Unit. See Figure 9.
- c. Unit Description. Wastewater in center of lagoon. Site has two adjacent lagoons. The lagoons are reported to be unlined.
- d. Dates of Operation. Unknown.
- e. Waste Description. Domestic wastewater.
- f. Previous Environmental Monitoring. None known.
- g. Known/Suspected Releases. None known. The lagoons are unlined; therefore, a potential for ground-water contamination exists.
- h. Environmental Recommendations. None.
- i. Reference. R. Nickolas Jr.

65. UNIT NUMBER AND NAME: FTBL-65, Oro Grande Oxidation Lagoon.

a. Type of Unit. Oxidation Lagoon.

b. Location of Unit. See Figure 8. Oro Grande Range Complex.

c. Unit Description. Domestic wastewater oxidation lagoon. Field investigation found the lagoon to have no standing water. The lagoon is reported to be lined. The lagoon is vegetated.

d. Dates of Operation. Unknown.

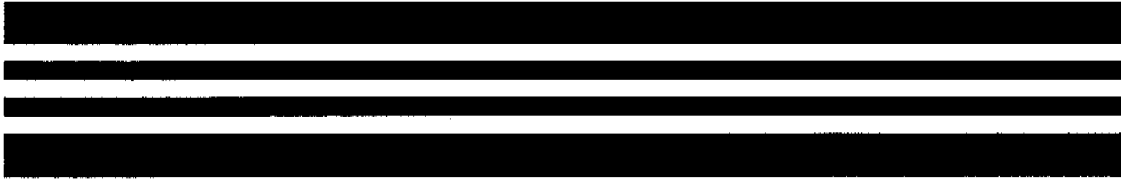
e. Waste Description. Domestic wastewater.

f. Previous Environmental Monitoring. None known.

g. Known/Suspected Releases. None known.

h. Environmental Recommendations. None.

i. Reference. R. Nickolas Jr.



**1. KEYWORDS**

ENVIRONMENTAL COMPLIANCE ASSESSMENT REPORT  
CULTURAL RESOURCES / AIR EMISSIONS  
ECAS / TRADOC INSTALLATIONS / WATER QUALITY MANAGEMENT  
SOLID WASTE / RADON / ASBESTOS  
LEAD-BASED PAINT / WASTEWATER

**2. START FY, QUARTER**            98    1  
**COMP FY, QUARTER**            98    1

**3. HQ DIVISION**

**4. PHASE**

**5. PROGRAM NO**            32

**6. SURVEY TYPE**

**7. INSTALLATION OR SOURCE OF INFORMATION (CITY & STATE OR COUNTY ARE ESSENTIAL)**  
FORT BLISS, TEXAS

**8. AUTHORS**  
VALCOURT, RICHARD

**9. ARLOC/ACTIVITY**            48083            000

**10. PROJECT CONTROL NUMBER**    32-EE-7170-97

# ECAS

(Environmental Compliance Assessment System)

ENVIRONMENTAL COMPLIANCE ASSESSMENT REPORT  
FORT BLISS, TEXAS  
1 - 16 DECEMBER 1997

#32-EE-7170-97



Prepared by:

U.S. Army Center for Health Promotion and Preventive Medicine

Aberdeen Proving Ground, MD 21010-5422

Distribution limited to U.S. Government agencies only; protection of privileged information evaluating another command; February 1998. Requests for this document must be referred to Commander, U.S. Army Training and Doctrine Command, ATTN: ATBO-SE, Fort Monroe, VA 23651-5451.



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE  
5158 BLACKHAWK ROAD  
ABERDEEN PROVING GROUND, MARYLAND 21010-5422

MCHB-TS-ESW (40)

26 FEB 1998

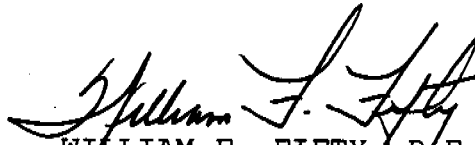
MEMORANDUM FOR Commander, U.S. Army Training and Doctrine  
Command, ATTN: ATBO-SE, Fort Monroe, VA  
23651-5451

SUBJECT: Environmental Compliance Assessment Report No. 32-EE-  
7170-97, Fort Bliss, Texas, 1-16 December 1997

Two copies of the subject report are enclosed. The Executive Summary is provided as Chapter 1 of the report. The point of contact for this report is Mr. Richard Valcourt. He may be contacted at DSN 584-8131 or commercial (410) 671-8131. Additional comments or concerns may be directed to the undersigned at DSN 584-3816 or commercial (410) 671-3816.

FOR THE COMMANDER:

Encl

  
WILLIAM F. FIFTY, P.E.  
Program Manager  
Surface Water and Wastewater

CF:  
CDR, Ft Bliss, ATTN: ATZC-DOE  
CDR, MEDCOM, ATTN: MCHO-CL-W  
CDR, USAEC, ATTN: SFIM-AEC-EQP  
CDR, USAEC, ATTN: SFIM-AEC-TIC  
CDR, DSA-W

***Readiness thru Health***



# **CHAPTER 1**

## **EXECUTIVE SUMMARY**

### **1.1 BACKGROUND**

**1.1.1** The Environmental Compliance Assessment System (ECAS) Program supports the Total Army (Active Army, Army Reserve, and Army National Guard). The U. S. Army Training and Doctrine Command (TRADOC) ECAS Program is executed to support the TRADOC Commanding General in achieving, maintaining, and monitoring full environmental compliance at the 17 TRADOC installations. Army Regulations (AR) 200-1 requires an external assessment of each installation every third year. The last external ECAS assessment at Fort Bliss was conducted in December 1994.

**1.1.2** This Environmental Compliance Assessment Report (ECAR) provides the results of the assessment at Fort Bliss, Texas. Fort Bliss was the 2nd TRADOC installation to be assessed during the third cycle of TRADOC's ECAS Program (beginning in FY 98) by U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). The USACHPPM assessed all 17 TRADOC installations during the second cycle of the ECAS Program (FY 95-97).

**1.1.3** The objective of the ECAS at Fort Bliss was threefold: (1) to provide a "snapshot in time" evaluation of Fort Bliss's environmental compliance status; (2) to identify specific deficiencies as well as systemic weaknesses of Fort Bliss's environmental program; and (3) to provide realistic suggested corrective actions that would help Fort Bliss achieve, maintain, and monitor environmental compliance. To accomplish this objective, the ECAS assessment team employed sampling strategies to obtain a representative view of Fort Bliss's activities and tenants. This Environmental Compliance Assessment Report (ECAR) should be used to implement Fort Bliss's continued commitment to improving environmental programs and complying with environmental laws and regulations.

**1.1.4** The assessment at Fort Bliss was performed by a matrixed team of Army personnel (military and civilian) from USACHPPM and TRADOC. The ECAS team performed the onsite assessment during 1-16 December 1997. The preliminary results of the onsite assessment were reviewed during the Draft Findings Review meeting, which was held on 15 December 1997. The assessment Team Leader, Fort Bliss Directorate of Environment (DOE) staff, and a

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TRADOC Environmental Office representative attended this meeting. Also in attendance was a representative from the Staff Judge Advocate Office.

## **1.2 SUMMARY OF FINDINGS.**

**1.2.1** Overall, Fort Bliss had a comprehensive and effective environmental program, which encompassed all media covered by Federal and state regulations. There was a high level of awareness of environmental regulations and responsibilities that influenced installation operations. A total of 124 findings were identified during the assessment. Twelve of the findings were positive. Table 1-1 presents a total summary of these findings by media type, finding category, and finding class.

**1.2.2** In order to improve upon the environmental program, focus is required on the following: eliminating the number of repeat ECAS findings; improving upon communications and coordination efforts between the Directorate of Environment and the Directorate of Public Works and Logistics; cleaning and reducing the number of unpermitted solid waste dump sites; and strengthening air quality policies to ensure total compliance with applicable regulatory requirements.

## **1.3 FOLLOW-UP ACTIVITIES**

Fort Bliss and TRADOC must complete the Installation Corrective Action Plan (ICAP), a tracking system and funding strategy for the corrective actions contained in this ECAR. The purpose of the ICAP is to serve as a planning document for Fort Bliss and TRADOC to use in funding, executing, and tracking the selected corrective actions. The ICAP tabular format lists findings, corrective actions, schedules, and required resources for correcting the deficiencies. The ICAP is enclosed as a separate attachment.

**TABLE 1-1  
SUMMARY OF TOTAL FINDINGS**

**Installation: Fort Bliss**

**FFID: TX-213720101**

**Fiscal Year: 1998**

	REGULATORY			MANAGEMENT			
Compliance Area	I	II	H/S	POS	ITP	H/S	TOTAL
Air Emissions Management	3	2	0	2	1	0	8
Cultural Resources Management	2	0	0	1	2	0	5
Hazardous Materials Management	0	0	7	0	0	0	7
Hazardous Waste Management	11	0	0	0	0	0	11
Natural Resources Management	0	0	0	1	3	0	4
Environmental Impacts	1	2	0	0	3	0	6
Environmental Noise	0	0	0	1	4	0	5
Installation Restoration Program	0	0	0	1	1	0	2
Pollution Prevention	0	0	0	0	2	0	2
Environmental Program Management	0	0	0	3	1	0	4
Pesticides Management	1	0	1	2	13	1	18
Petroleum, Oils, Lubricants Management	2	0	0	0	6	0	8
Solid Waste Management	8	0	0	1	5	0	14
Storage Tanks Management	4	1	0	0	2	0	7
Polychlorinated Biphenyls (PCBs)	0	0	0	0	0	0	0
Asbestos	0	0	0	0	2	0	2
Radon	0	0	0	0	0	0	0
Lead-Based Paint	0	0	0	0	1	0	1
Wastewater Management	10	1	0	0	1	0	12
Water Quality Management	5	1	0	0	2	0	8
<b>TOTAL</b>	<b>47</b>	<b>7</b>	<b>8</b>	<b>12</b>	<b>49</b>	<b>1</b>	<b>124</b>

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TABLE 1-1  
SUMMARY OF TOTAL FINDINGS (continued)

KEY TO COMPLIANCE AREAS:

I:	Deficiency with exiting regulation.
II:	Deficiency with future regulation.
III:	AR/DOD/Management Practice finding.
H/S	Health and Safety.
POS:	Positive finding.

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## CHAPTER 2

### BACKGROUND AND SCOPE

#### 2.1 ENVIRONMENTAL COMPLIANCE ASSESSMENTS

**2.1.1 Objectives.** The ECAS Program evolved from the Department of the Army's recognition that Army installations needed assistance in complying with the vast array of environmental legislation. The objective of the ECAS Program is to assist installation commanders in achieving, maintaining, and monitoring compliance with Federal, State, local, Department of Defense (DOD), and Army environmental regulations. The ECAS process provides a framework for the installation to identify and track compliance deficiencies. As a result, an installation's overall environmental program can be developed or improved. Of great benefit to the installation is the fact that the ECAS process not only identifies deficiencies, but also provides suggested corrective actions and targets resources to implement solutions.

**2.1.2 Roles and Responsibilities.** The USAEC manages the Army ECAS program by developing the ECAS work plan and budget, overseeing ECAS software and protocol development, providing compliance tracking and trend analysis, and providing ECAS training. Army assessment teams, such as USACHPPM, perform the onsite external assessments and produce the ECARs. During the second cycle of ECAS assessments, which began in FY95, Major Commands (MACOMs) increased their role in the ECAS assessment and the ICAP process. The MACOM and the installation select the corrective actions, negotiate schedules, and co-sign the ICAP. During the third cycle of ECAS assessments, which began in FY98, MACOMs such as TRADOC, began focusing on the enhancement of the ECAS process via pollution prevention integration, improved root cause analysis, and cost reduction initiatives.

**2.1.3 Installation Risk Profile.** Beginning with the third cycle of ECAS assessments, TRADOC adopted a risk-based approach to their ECAS Program. This approach allows "high risk" installations to be assessed on a more frequent basis while "low risk" installations are evaluated on a less frequent basis. This installation risk profile is established by TRADOC based on the installation's previous ECAS assessment and history of enforcement actions.

**2.1.4 Customized Assessment Teams.** Consistent with TRADOC's risk-based approach for their ECAS Program, "high risk" and "low risk" protocol areas are also designated and the assessment team

customized accordingly. The "low risk" protocol areas are not evaluated during each external assessment. Establishment of "low risk" protocol areas is a collaborative effort between the MACOM, installation environmental staff, and ECAS assessment Team Leader.

## **2.2 FORT BLISS BACKGROUND INFORMATION**

**2.2.1 Geographic Location.** Fort Bliss occupies approximately 1.2 million acres of land in Texas and New Mexico. Areas controlled by Fort Bliss include the Main Cantonment Area, Biggs Army Airfield (AAF), and Logan Heights in the El Paso vicinity, as well as outposts at the McGregor Missile Firing Range, Dona Ana Range, and the Oro Grande Range.

Fort Bliss Cantonment, Logan Heights, and Biggs AAF are located in El Paso County and within the city limits of El Paso, Texas. These facilities occupy approximately 120,000 acres of land. The McGregor Range encompasses approximately 693,000 acres of land located in Otero County, south-central New Mexico. The range stretches nearly 40 miles northward from the Texas-New Mexico border to the Sacramento Mountains and 25 miles eastward from the U.S. Highway 54 to the Otero Mesa and Hueco Mountains. The Dona Ana and Oro Grande Ranges, located in both Otero and Dona Ana counties, extend westward from U.S. Highway 54 to the Organ Mountains and encompass nearly 300,000 acres of land.

Although the fort was first established in 1848, the area was originally inhabited by Native American Indians and then Spanish explorers and settlers who traveled through the mountain pass located west of the present site of Fort Bliss in the early 1500's. Because of this long period of habitation, the installation contains many sites and structures of cultural and historical significance.

**2.2.2 Mission.** Fort Bliss is a TRADOC installation, which has the primary mission of supporting the U.S. Army Air Defense Artillery Center (USAADAC). The post mission is to prepare and train combat air defense artillery troops, combat leaders, commissioned, and noncommissioned officers (NCOs) of all ranks. The fort also maintains a high state of combat readiness for Forces Command (FORSCOM) units assigned to the USAADAC. In addition, the German Air Force Air Defense School, William Beaumont Army Medical Center and several other tenant activities are located at the fort.

## **2.3 THE ECAS ASSESSMENT PROCESS**

**2.3.1 Evaluation Protocol.** The ECAS team used the following

protocols to develop findings during the assessment: the Environmental Assessment Management (TEAM) Guide, September 1997 version; the July 1997 New Mexico and the June 1997 Texas supplements to the TEAM Guide; and the September 1997 Army supplement to the TEAM Guide. The New Mexico and Texas supplements were written by U.S. Army Corp of Engineers (USACE) Construction Engineering Research Laboratory (CERL). Version 1.8 (September 1997 revision) of the ECAS software was used to build the findings database and generate the corrective action report contained in this ECAR.

**2.3.2 ECAS Assessment Teams.** The ECAS assessment at Fort Bliss was performed by a matrixed team of Army personnel (military and civilian) from the USACHPPM and the TRADOC Environmental Office. Table 2-1 contains a list of team members, their educational backgrounds, and their areas of responsibilities during the assessment.

**2.3.3 Scoping Visit.** The ECAS assessment Team Leader and the TRADOC ECAS Coordinator conducted a scoping visit at Fort Bliss, 6-10 October 1997. The Team Leader and TRADOC representative presented an entrance brief to the Fort Bliss Garrison Commander, Director of Environment and several command elements to define the scope of the onsite assessment. Desk-side or telephonic information briefings were provided to other directorates and major tenants. The Team Leader also made administrative and logistical arrangements, coordinated with selected activities, acquired background information, and determined the data management requirements. During the scoping visit, it was agreed that all of the TEAM Guide protocol areas except for one would be evaluated. The "low risk" protocol area omitted was radon.

**2.3.4 Onsite Assessment.** During the onsite assessment (1-14 December 1997) the assessment teams visited and inspected various activities and facilities, reviewed records, and interviewed personnel to determine compliance status and program weaknesses. The team members also provided onsite assistance, generally verbal and written technical guidance, to Fort Bliss personnel as requested. The team developed findings and entered them into databases using the ECAS software. The ECAS Team Leader provided quality control on all findings and updated the DOE staff daily on the team's preliminary findings. The daily reviews allowed continual interaction between the DOE staff, assessed organizations and the ECAS teams, and continual improvement in individual findings. Each afternoon the team met to discuss findings, exchange information, identify any problems encountered, and finalize the schedules for the following day. Before leaving Fort



**TABLE 2-1 FORT BLISS ECAS TEAM**

Richard Valcourt	B.S. Civil Engineering	Team Leader
Towanda Cooper	B.S. Business Administration	Administrative Assistant
Stafford Coakley	B.S. Civil Engineering	Air Emissions Management
Christopher McDaid	B.A. Anthropology & History M.A. Colonial American History	Cultural Resources Management
Jennifer Houser	B.S. Environmental Health Science	Hazardous Materials Management; Toxics: Asbestos, Radon, Lead-based Paint
Murray Brown	B.S. Chemistry M.S. Chemistry	Hazardous Waste Management; Toxics: PCBs; Pollution Prevention
Kenneth Mioduski	B.A. Environmental Engineering M.A. Environmental Engineering	Hazardous Waste Management; PCBs; Toxics; Pollution Prevention
2LT Dereck Irminger	B.S. Mechanical Engineering	Hazardous Waste Management; PCBs; Toxics; Pollution Prevention
Peter Anderson	B.S. Biology M.S. Biology	Pollution Prevention
Thomas Stierhoff	B.S. Biology & Natural Resources M.S. Biology & Natural Resources	Natural Resources Management; National Environmental Policy Act
David Bensch	Environmental Engineering Studies	Environmental Noise
Kathleen Butoryak	B.S. Geology M.S. Geology	Installation Restoration Program; Solid Waste Management; Storage Tank Management
Jefferson Ghent	B.S. Geology	Installation Restoration Program; Solid Waste Management;
Susan Newkirk	B.S. Biology	Environmental Program Management
Malcolm Boswell	B.S. Botany	Pesticide Management
1LT Brian Nell	B.S. Chemical Engineering	Storage Tank Management
Kent Prinn	B.S. Chemical Engineering M.S. Engineering Management	POL Management; Wastewater Management
Richard Valdivia	B.S. Biological Oceanography	Water Quality Management

Bliss, each team member briefed their perspective DOE point of contact on specific findings.

**2.3.5 Draft Findings Review.** A Draft Report was produced at the end of the onsite assessment. On 15 December, a meeting was held to review the draft ECAS findings and suggested corrective actions. Attendees included the ECAS Team Leader, TRADOC representative, representatives from the DOE and a SJA representative. The draft report, including any substantial changes made during the Draft Findings Review, was provided to Fort Bliss, the TRADOC Environmental Office, and USAEC for review and comment.

**2.3.6 Exit Briefing.** On 16 December, the Team Leader provided an exit briefing to the Fort Bliss Commanding General, Garrison Commander and members of the Environmental Quality Control Committee (EQCC). Representatives from TRADOC, DOE, SJA, and other major organizations also attended the briefing. The ECAS Team Leader presented a summary of the findings and discussed problem areas found during the ECAS assessment.

**2.3.7 Environmental Compliance Assessment Report.** The Fort Bliss DOE, TRADOC Environmental Office, and USAEC reviewed the draft report and provided comments during a 4-week period after the assessment. These comments were reviewed by the ECAS team members and incorporated into the final ECAS database. The ECAR was produced and distributed 4 weeks after the comments were received, 8 weeks after the onsite assessment.

**2.3.8 Installation Corrective Action Plan.** The ICAP is a planning document that is used as a funding identifier and tracking system for the selected corrective actions specified in the ECAR. The draft ICAP is provided on disk so it can be modified and developed as necessary. The ICAP can be incorporated into a database management software such as Dbase III or IV, Foxpro, QuattroPro, Paradox, etc. The ECAS software is also capable of transferring the findings database into a generic data files that can be used by Fort Bliss. Fort Bliss may be requested periodically by TRADOC to submit a report on the status of the ICAP.

## **2.4 SAMPLING STRATEGY AND SITE EVALUATED**

**2.4.1 Sampling Plan Strategy.** The ECAS teams used the following

strategy to select activities for observation:

- a. Sites with environmentally significant operations (e.g., vehicle maintenance, hazardous waste generation, boiler plants);
- b. Sites with compliance issues identified by Federal and state regulators;
- c. Activities requested by Fort Bliss or TRADOC for assessment emphasis;
- d. Findings from the 1994 ECAS and previous environmental reviews; and
- e. Random selections (e.g., dumpsters, storage tanks, stormwater outfalls, oil/water separators).

Written documentation which was consulted during sampling plan development included organizational charts, Public Works building user lists, lists of hazardous waste generators, storage tank inventories, and the Spill Prevention, Control, and Countermeasures Plans (SPCCP).

For several media, nearly 100 percent coverage was attainable. The Pesticide Management, Storage Tanks and Water Quality Management media areas are examples of this. For the larger media areas, almost 100 percent of the major environmentally significant activities were visited (e.g., landfills, treatment plants). A sample of the other environmentally significant activities (e.g., motor pools, hazardous material/waste accumulation areas) was selected to represent all similar activities at the posts.

**2.4.2 Specific Sites Evaluated.** Appendix B lists the actual activities and buildings evaluated by the ECAS team during the assessment, the media areas covered, and the finding numbers.

## **2.5 REFERENCES USED FOR COST ESTIMATES**

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Estimating Costs of Air Pollution Control Systems, Vataavuk, William M., and Robert Neveril, Chemical Engineering, October 1980.

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Means Heavy Construction Cost Data 1995, 9th Annual Edition, R.S. Means Company, Inc., Kingston, MA.

The Cost Digest: Cost Summaries of Selected Environmental Control Technologies, EPA 600/8-84-010, U.S. Environmental Protection Agency, October 1984.

Environmental Health and Safety Monitoring, 1995/1996 Catalog, Mitchell Instrument Co., San Marcos, CA.

### CHAPTER 3 ECAS FINDINGS AND CORRECTIVE ACTIONS

This chapter contains the findings developed by the assessment team during the on-site assessment. The corrective actions listed are those agreed to during the comment period that followed the on-site assessment and Draft Findings Review. The findings are listed in order by TEAM Guide section number (or medium).

Findings are listed according to Class (or Category) in the following printouts. The definitions of Classes are:

**Class I:** Findings of immediate noncompliance with an environmental regulation, compliance agreement, consent order, or an existing notice of violation (NOV).

**Class II:** Findings of future noncompliance with an environmental regulation, compliance agreement, consent order, or an existing NOV.

**Class III:** Findings for which there are no specific Federal, state, or local regulatory requirements. These findings will include deviations from Army Regulations, DOD Directives, or other good management practices.

**Health/Safety:** Findings related to the Occupational Safety and Health Act and National Fire Protection Act requirements, as well as Department of Transportation regulations. Health and Safety findings are not classified as Class I, II, or III and are not eligible for environmental funding under the 1383 process.

**Positive:** Findings identified for situations where installations have exceeded the regulatory requirements or have implemented programs or actions that exemplify good management practices.

## **AIR EMISSIONS MANAGEMENT**

The Air Emissions Management Program at Fort Bliss is a major focus area for the Directorate of Environment (DOE) and has achieved tremendous improvement attaining and maintaining compliance since the last assessment. This improvement can be attributed to the air program managers proactive approach to attaining full compliance with all applicable regulations and by emphasizing the importance of complete open communication with installation personnel, contractors, tenant activities, and regulatory agencies. This emphasis has allowed the program to have success in implementing stringent requirements mandated by the State Attorney General's legal action on Fort Bliss even before it became final.

Fort Bliss has been ordered by the States Attorney General to resolve past and present notices of violation (NOVs) in a Final Agreement that has not been officially signed and approved. Technically, the NOVs are unresolved until the agreement is signed.

Future non-compliance issues were identified in the areas of the Clean Air Act, Risk Management Plan (RMP) development which is due by June 1999. Developing Risk Management Programs require a lot of time and effort, therefore the USACHPPM recommend that installations procrastinate in complying with the RMP Rule.

Findings identified a few DPWL emission sources operating with faulty emission control equipment. Federally enforceable requirements that apply to several sources at Fort Bliss were also identified as present non-compliance issues.

Fort Bliss is preparing to develop a Title V permit application and all compliance issues will be addressed in the permit and a compliance plan/schedule will be implemented to attain total compliance with applicable regulatory requirements.

A.0.500.4T #1 I STATE CORRECTIVE ACTION     Air Emissions

FINDING ID: A-SC-04

MANUAL QUESTION NUMBER: A-000-500-4T

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL HEAT SHOP

IFS FACILITY NUMBER: 01159

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: The automatic paper and plastic shredder at Building 1159 is fitted with a particulate control cyclone that is poorly designed allowing fugitive emissions to be emitted from the collection system. Because the control system failure consistently occurs, the Directorate of Environment (DOE) recommended that the facility be shut down until modifications can be done.

CRITERIA: Emission capture and abatement equipment must be maintained in good working order and operated according to Texas requirements (30 TAC, Section 101.7(a)).

FINDING COMMENTS: There was excessive amount of debris around the facility indicating a problem with fugitive emissions. The Directorate of Public Works and Logistics (DPWL) personnel have plans to use the shredder in its present state.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Replace the current collection system.  
Estimated cost \$20k.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 20000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DPWL is contracting with users of the machine (DPTMS) to replace the shredder. Funding is the issue.

A.1.1 #1 I FEDERAL CORRECTIVE ACTION

Air Emissions

FINDING ID: A-SC-01

MANUAL QUESTION NUMBER: A-001-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: INST

IFS FACILITY NUMBER: 00515

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: Fort Bliss has received numerous Notices of

Violations (NOVs) dating back to the early 1980's from the El Paso

City-County Health and Environmental District (EPCCHED) and from the Texas Natural Resource Conservation Commission (TNRCC).

Fort Bliss has negotiated an Agreed Final Agreement with the TNRCC and EPCCHED in the settlement of alleged air quality violations. The final judgement is a legal binding agreement administered through the Office of the Attorney General, State of Texas and imposes specific monitoring, recordkeeping, and reporting requirements for asbestos, fugitive dust, fuel storage, and fuel dispensing management. This agreement is in final draft, but has not received all the necessary signatures/concurrences from all responsible parties.

CRITERIA: The current status of any ongoing or unresolved consent

orders, compliance agreements, notices of violation (NOVs), interagency agreements, or equivalent state enforcement actions is

required to be examined (a finding under this checklist item will

have the enforcement action/identifying information as the citation). Referenced Enforcement Action: State of Texas v. U.S. Army Air Defense Artillery Center and Fort Bliss and Army Air Force Exchange System, Draft Agreed Final Judgement, dated November 26, 1997.

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Resources have to be prioritized to ensure that all mandates decreed by the Office of the Attorney General are met. Fort Bliss is very susceptible to civil lawsuits and fines, if it does not comply completely with this final



judgement. In addition to paying for corrective actions on potential NOV's, Fort Bliss may potentially have to expend resources to settle lawsuits and fines.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agreement in process.

TRADOC COMMENT: Recommend changing the finding category to Class II. Rationale: Agreement is still in draft therefore, the installation is not out-of-compliance yet.

USACHPPM COMMENT: Finding shall remain a Class I finding. The draft Final Judgement against Fort Bliss was negotiated during 1996/97 and is based on past, repeated, and/or current violations. As late as April of 1997, Fort Bliss was inspected by the State and current violations were found and documented. Although the Final Judgement is in a "final draft" status, it is not technically agreed and accepted by Fort Bliss until the "responsible officials" have signed off on the judgements. The judgement is not a compliance agreement/plan, but a legal binding court-ordered judgement for a past or current violation(s).

A.90.6 #1 I FEDERAL CORRECTIVE ACTION

Air Emissions

FINDING ID: A-SC-09

MANUAL QUESTION NUMBER: A-090-006

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DIRECTORATE OF ENVIRONMENT

IFS FACILITY NUMBER: 00515

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The DOE has not submitted reports that it has purchased certified equipment as of 1993. Fort Bliss ensures that the equipment is certified, but did not submit notification to the EPA.

CRITERIA: 1) Installations/CW facilities recovering refrigerant from small appliances, MVACs, and MVAC-like appliances for the purpose of disposal of these appliances, are required to certify to the USEPA that appropriate recovery equipment has been acquired (40 CFR 82.162(c)). 2) Installations/CW facilities maintaining, servicing, or repairing appliances, except for MVACs, and installations/CW facilities disposing of appliances, except for small appliances and MVACs, are required to submit certification to the USEPA (40 CFR 82.162(a)).

FINDING COMMENTS: Staffing levels and the availability of resources to meet the requirements were not in place.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Contact the EPA regional office in reference to submitting certification reports for all CFC equipment at Fort Bliss. Submit reports to the EPA. Note that Fort Bliss DPWL is not responsible for all CFC recovery and recycling equipment used by major tenants. Estimated Cost: \$0

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Equipment is EPA certified. DOE will contact the EPA for requirement and will submit reports.

A.1.4 #1 II FEDERAL CORRECTIVE ACTION

Air Emissions

FINDING ID: A-SC-02

MANUAL QUESTION NUMBER: A-001-004

FINDING CATEGORY: CLASS II

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ORO GRANDE AND DONA ANA RANGES

IFS FACILITY NUMBER: MULT

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The Oro Grande and Dona Ana cantonment areas

have propane (LPG) storage areas that exceed the threshold planning quantities under the Clean Air Act, Section 112(r), Risk Management Plan (RMP) Rule. The RMP threshold quantity for the use or storage of propane is 10,000 pounds(lb.). The Oro Grande range has 3-4 propane tanks that store approximately 5,000 gallons (gal) each. The range at Dona Ana has four 1,000 gal propane tanks all interconnected. As per EPA guidance, any tank(s) that are interconnected are counted as a single storage vessel, therefore the total quantity is 4,000 gal. Based on the density of propane (5.41 lb/gal), each tank at Oro Grande is approx. 27,050 lb and 21,640 lb stored at Dona Ana cantonment area.

CRITERIA: Installations/CW facilities with processed involving regulated substances above specific threshold levels are required to develop a risk management program (RMP) (40 CFR 68.150) [May 1997].

FINDING COMMENTS:

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Fort Bliss will have to develop a Risk Management Program for the propane storage areas at the Oro Grande and Dona Ana Ranges. A RMP which is a summary of your program will have to be submitted to the EPA by June 1999. Based on RMP's prepared by USACHPPM, the average cost to develop a plan is approx. \$45K for one covered process. The RMP Rule has 3 distinct levels of compliance based on the potential offsite impact of a covered process. It is unlikely that the propane storage areas at the ranges will trigger the most stringent requirements (Program Level 3) with no offsite impact to human and environmental receptors. If the propane storage areas fall under Program Level 1, less resources will be needed to develop a program.

CORRECTIVE ACTION TYPE: OTHERS

COST: 45000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree. DOW will develop the RMP for propane storage. DOE has an approved project for fiscal year 1999 for development of RMP's and funding for the propane plan will be provided by that project.

A.1.4 #2 II FEDERAL CORRECTIVE ACTION

Air Emissions

FINDING ID: A-SC-03

MANUAL QUESTION NUMBER: A-001-004

FINDING CATEGORY: CLASS II

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL CENTRAL CHLORINE STORAGE

IFS FACILITY NUMBER: 01112

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: The central chlorine storage facility stores

approximately thirty 150 pound (lb) cylinders (7,500 lb) of chlorine. This exceeds the Risk Management Plan (RMP) threshold quantity of 2,500 lb for chlorine stored or used at one location.

CRITERIA: Installations/CW facilities with processed involving regulated substances above specific threshold levels are required to develop a risk management program (RMP) (40 CFR 68.150) [May 1997].

FINDING COMMENTS: The DPWL storage facility is inadequate for storing a chemical such as chlorine. The unfortified storage area gives no protection from the elements, tampering, human or equipment failure. It is very likely that a potential accident could occur at this facility. The DOE had proposed to decentralize the chlorine storage area, thus reducing the storage of chlorine in one location and elevating the need to develop a RMP if all areas stored less than 2,500 lb.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Fort Bliss will have to develop a Risk Management Program for the chlorine storage area. A RMP plan which is a summary of your program will have to be submitted to the EPA by June 1999. Based on RMP's prepared by USACHPPM, the average cost to develop a program is approx. \$45K for one covered process. The RMP Rule has 3 distinct levels of compliance based on the potential offsite impact of a covered process. It is likely that the chlorine storage area will trigger the most stringent requirements (Program Level 3) with offsite impacts to human and environmental receptors. If the storage area is decentralized, the DOE should ensure that new storage facilities/areas have adequate protection (i.e., barricades, locked enclosed access, shaded area/shelter or enclosure). Because the storage facilities are located in populated work areas, chlorine shelters should be totally

enclosed and fitted with the necessary alarms/warning systems.  
Estimated Cost: \$10,000 per shed.

CORRECTIVE ACTION TYPE: OTHERS  
COST: 55000  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT:  
Decentralization of chlorine storage facilities. Construct new storage facilities with adequate protection, enclosures and alarms. This corrective action will bring Fort Bliss below the threshold storage quantity for chlorine and thus eliminate the need for an RMP.

A.5.4.TX #1 III STATE CORRECTIVE ACTION      Air Emissions

FINDING ID: A-SC-10

MANUAL QUESTION NUMBER: A-005-004-TX

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL POL TANK FARM

IFS FACILITY NUMBER: 11018

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: The secondary seal on the aboveground floating roof tank No. 11018 has a noticeable gap greater than 1.27 cm (as per 40 CFR 60.113b(b)(4)(ii)(B)). Because of the low vapor pressure of JP-8, the standards in 40 CFR 60.113(b)(4)(ii)(B) does not truly apply to this tank, but it was used as a benchmark as an acceptable standard by the assessor.

CRITERIA: Emissions capture and abatement equipment must be maintained in good working order and operated according to Texas requirements (30 TAC, Section 101.7(a)).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Repair secondary seal on tank No. 11018 to prevent damage to the primary seal. Estimated Cost: \$10,000.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 10000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DPWL is checking the seal periodically and attempting to obtain DLA funding to repair the seal.

A.1.2.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Air Emissions

FINDING ID: A-SC-07

MANUAL QUESTION NUMBER: A-001-002-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00515

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The Directorate of Environment personnel are developing a cost-effective solution to tracking data used to calculate air emissions from registered sources at Fort Bliss. Upon completion, this would alleviate the need for contractor prepared air emission inventories that are due annually to the TNRCC. This system will result in an estimated cost savings of approximately \$50,000 annually.

CRITERIA: Management and organization of paperwork, materials, and personnel should be done in a manner that prevents noncompliance and recurrence of noncompliance, precludes/minimizes regulatory enforcement actions (including warning letters etc.) promotes good public relations, and addresses systemic weaknesses in the overall operation of the program (MP).

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION: Ensure that emission calculations are updated with the latest EPA approved methods for estimating pollutant emission. The EPA, Office of Air Quality Planning and Standards (OAQPS) technology transfer bulletin board at <http://www.epa.oar.oaqps.gov> post all updates/changes and new methods.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action.



A.1.2.A #2 POSITIVE ARMY/DOD CORRECTIVE ACTION Air Emissions

FINDING ID: A-SC-08

MANUAL QUESTION NUMBER: A-001-002-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DPWL REFRIGERATION SHOP

IFS FACILITY NUMBER: 01116

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: The Directorate of Public Works and Logistics(DPWL) Refrigeration Shop personnel has developed standard operating procedures (SOP)for the management of CFCs. This task supercedes the requirements of the job involved in the repair and maintenance using CFCs. The SOP sites regulatory guidelines in the handling and management of CFCs at Fort Bliss.

CRITERIA: Management and organization of paperwork, materials, and personnel should be done in a manner that prevents noncompliance and recurrence of noncompliance, precludes/minimizes regulatory enforcement actions (including warning letters etc.) promotes good public relations, and addresses systemic weaknesses in the overall operation of the program (MP).

FINDING COMMENTS: The DOE have plans to develop a comprehensive CFC management plan that will incorporate the in-house SOP at the Refrigeration Shop.

STATUS OF CORRECTION:

CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

## **Cultural Resources Management Program**

The Cultural Resources Management Program has made great strides since the last ECAS. The historic building program has completed a survey of all structures over 50 years of age and prepared a nomination packet for the Fort Bliss Historic District. The Fort Bliss Curation Facility meets the standards in 36 CFR 79 and the staff is working to process the entire collection of artifacts and documents. The archaeology program has adopted a management approach and begun to evaluate the over 16,000 sites on Fort Bliss for eligibility to the National Register of Historic Places. Fort Bliss also plans to evaluate the sites in the "Red Zones" the no access areas, and the "Green Zones" the limited use areas. The archaeologists have coordinated with the trainers to set priorities for the evaluation and testing in the Red and Green Zones focusing on those zones that the trainers believe are most critical for their mission. The post is working with the federally recognized Native American nations in order to comply with the Native American Graves Protection and Repatriation Act of 1990.

Issues of concern for the Fort Bliss CRM Program are coordination with the Directorate of Public Works and Logistics regarding projects that have the potential to effect historic structures. Also the Directorate of Contracts should develop an internal review procedure to ensure that projects that have the potential to impact historic structures are in compliance with Section 106 of the National Historic preservation Act of 1966 as amended.

C.5.2 #1 I FEDERAL CORRECTIVE ACTION

Cultural Resources

FINDING ID: CR-CM-03

MANUAL QUESTION NUMBER: C-005-002

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOC

IFS FACILITY NUMBER: 02021

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The Directorate of Contracts awarded contracts prior to compliance with Section 106 of the National Historic Preservation Act of 1966 as amended.

CRITERIA: Prior to the start of a new undertaking, installations/CW facilities are required to take into account the effects of the undertaking on property included in or eligible for the National Register of Historic Places (36 CFR 800.1) [May 1995].

FINDING COMMENTS: The Directorate of Contracts expressed an interest in getting a list of all known eligible or potentially eligible structures on Fort Bliss. With this list they would be more able to ensure compliance with the National Historic Preservation Act of 1966 as amended.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Have DOC develop an internal process to ensure

compliance with Section 106 of the National Historic preservation

Act. This process would require coordination with the installation Historic preservation Officer or his designee prior to a contract being awarded that has the potential to effect a structure eligible or potentially eligible for inclusion to the National Register of Historic Places. Estimate Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The Directorate of Contracting awarded contracts prior to compliance with Section 106 of the National Historic Preservation Act of 1966 as amended. This is wrong information. We do not award without concurrence from DOE. The group from TRADOC had a problem with a porch we did but the compliance had been secured

before the award. There have been several meetings with DOE on the Operating Procedures. At the present time, DPW&L staffs before DOC receives the requirement. This is a DPW&L requirement and not the Directorate of Contracting. However, we agree to ensure that DOC receives that extra piece of paper.

USACHPPM COMMENT: It was stated that on occasion when federal funds had been expended for more than nondestructive planning on projects that did in fact include historic properties (defined as properties listed on or eligible for inclusion to the National Register of Historic Places). Those occasions when funds are expended for other than planning on historic properties prior to the completion of the "Section 106 Process" (which is explained in 36 CFR 800) are inconsistent with 36 CFR 800.3(c). Regulation 36 CFR 800.3(c) states: Section 106 requires the Agency Official to complete the section 106 process prior to the approval of the expenditures of any Federal Funds on the undertaking or prior to the issuance of any license or permit. If contracts on historic properties have slipped through the system in the past then it would benefit the Fort Bliss DOC to prevent it from happening again.

C.5.3 #1 I FEDERAL CORRECTIVE ACTION

Cultural Resources

FINDING ID: CR-CM-04

MANUAL QUESTION NUMBER: C-005-003

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: 08777

FACILITY TYPE: HOUSING & COMMUNITY FACILITIES

FINDING DESCRIPTION: Service orders and the work done to fulfill them are undertakings as defined in 36 CFR 800 "Protection of Historic Properties". These small projects have the potential to effect the historic Army family houses on Fort Bliss. Currently, the requirements of the Fort Bliss programmatic agreement on historic properties are not being met. The Texas State Historic Preservation Officer is not consulted on these undertakings. The Advisory Council of Historic Preservation is not provided an opportunity to comment on these undertakings.

CRITERIA: The installation/CW facility is required to consult with the SHPO during the identification, location, and evaluation of historic properties and in assessing the effect of any undertaking on historic property (36 CFR 800.4 and 800.5).

FINDING COMMENTS: Small projects like changing light fixtures or plumbing fixtures have the potential to effect a historic property. The Fort Bliss Historic Preservation Officer is currently planning to develop guidance for these small projects that if followed by craftsmen will ensure compliance.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED  
CORRECTIVE ACTION: Develop a process that ensures that the installation historic preservation officer reviews any undertaking that could effect a structure that is eligible or potentially eligible for the National Register of Historic Places.  
Estimated  
Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Concur.  
DPWL and DOE are working together to develop a comprehensive review process. One action being taken is to put a list of all historic properties in a public folder on e-mail. Anyone undertaking work at Fort Bliss can check the folder and take appropriate steps to comply.

C.2.1.A #1 III ARMY/DOD CORRECTIVE ACTION Cultural Resources

FINDING ID: CR-CM-02

MANUAL QUESTION NUMBER: C-002-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Red Zone 6 had been entered by a tracked vehicle some time after the protective berm had been placed around it. Also, some of the signs stating that the area was off limits, by order of the Commanding General, had been removed. This is counter to Fort Bliss policy.

CRITERIA: Fort Bliss policy as stated in "Standard Operating Procedures for Weapons Firing and Maneuver Area Use" dated 15 July 1996 page E-6-1, is that all "Red Zones" are off limits to all vehicular activity.

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Work with Range Operations in order to reinforce that all units training on Fort Bliss must comply with the Commanding General's policies. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Signs completed. Corrective action is an ongoing process. "Off Limits" signs have been replaced. This issue has been added to the Unit Commander's Course taught bi-monthly at McGregor Range.

C.20.1 #1 III FEDERAL CORRECTIVE ACTION Cultural Resources

FINDING ID: CR-CM-01

MANUAL QUESTION NUMBER: C-020-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Much of the Fort Bliss archaeological collection had not been processed and curated in accordance with 36 CFR 79 "Curation of Federally Owned Archaeological collections". The Fort Bliss curation facility is in compliance with 36 CFR 79 but not all of the artifactual or documentary material had been processed.

CRITERIA: Installations/CW facilities responsible for the long-term management and preservation of pre-existing collections are subject to certain regulations regarding curation (36 CFR 79.5(a)).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Continue to support at the present level the processing of all artifactual and documentary material in the Fort

Bliss collection. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree.



C.1.2.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Cultural  
Resources

FINDING ID: CR-CM-05

MANUAL QUESTION NUMBER: C-001-002-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The Cultural Resources Management Program has made great strides since the last ECAS. The historic building program has completed a survey of all structures over 50 years of age and prepared a nomination packet for the Fort Bliss Historic District. The Fort Bliss curation facility meets the standards in 36 CFR 79 and the staff is working to process the entire collection of artifacts and documents. The archaeology program has adopted a management approach and begun to evaluate the over 16,000 sites on Fort Bliss for eligibility to the National Register of Historic Places. The post is working with the federally recognized Native American nations in order to comply with the Native American Graves Protection and Repatriation Act of 1990.

CRITERIA: Management and organization of paperwork, materials, and personnel should be done in a manner that prevents noncompliance and recurrence of noncompliance, precludes/minimizes regulatory enforcement actions (including warning letters etc.) promotes good public relations, and addresses systemic weaknesses in the overall operation of the program (MP).

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

## **HAZARDOUS MATERIALS MANAGEMENT**

Overall, the Hazardous Materials Management Program is in excellent condition. The Installation Safety Office, with the exception of the MEDDAC manages the Fort Bliss Hazard Communication (HAZCOM) Program.

The installation Safety Office provides both initial and refresher HAZCOM training to all facilities at Fort Bliss. Except for the Directorate of Public Works and Logistics (DPWL) facilities, all of the activities visited had received HAZCOM training.

All facilities visited had Material Safety Data Sheets (MSDSs) readily available for products used by personnel, and were properly labeling their containers except for the Army and Airforce Exchange Service (AAFES).

Compressed gas cylinders were not being stored properly at two DPWL facilities.

Several facilities did not have adequate emergency eyewash/safety shower facilities provided for a variety of reasons (i.e., flushing streams were uneven and too low on one side; blocked; misused as a hand washing device; did not work at all; had clogged flushing streams; required too many steps to operate; or did not exist).

HM.2.1 #1 HS FEDERAL CORRECTIVE ACTION      Hazardous Materials

FINDING ID: HM-JH-01

MANUAL QUESTION NUMBER: HM-002-001

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: MULT

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: The Directorate of Public Works and Logistics (DPWL) Aircraft Maintenance Sheet Metal Shop, Bldg# 11108, had a stand-alone plumbed emergency eyewash/safety shower facility that was inaccessible. In addition to being blocked, the eyewash/shower was not activated at least weekly to verify that they work properly. The Fort Bliss Auto Shop, Bldg# 820, had a stand-alone plumbed eyewash in work bay# 20 that was inaccessible.

CRITERIA: Installations must provide for immediate emergency use of suitable facilities for quick drenching and flushing of eyes and body within the work area. Emergency eyewash/shower facilities should be activated at least weekly to verify that they operate properly. The water should be allowed to run at least three minutes to remove stagnant water and any harmful bacteria that may be present in the water supply lines [29 CFR 1910.151 (c)] and American National Standard (ANSI) Z358.1-1990, for emergency eyewash and shower equipment.

FINDING COMMENTS: The supervisor of the work area in Bldg# 11108 stated that the eyewash/shower facility was not flushed weekly because there was no floor drain (since there was no regulatory requirement for one), and they did not want the water to run out onto the floor.

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Establish a program to check emergency eyewash/shower facilities at least daily to ensure that they are not blocked from use. Also, flush the water lines of stand-alone

emergency eyewash/shower facilities at least weekly for three minutes to remove potentially harmful bacteria and to ensure that the facilities are functional. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE  
COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Corrective action completed.

TRADOC COMMENT: Recommend adding the following: "Although a floor drain is not specifically required by regulation, a floor drain is generally accepted as being an integral part of an emergency shower when installed in a building. This report should also recommend installation of a shower drain.

USACHPPM COMMENT: Does not concur with TRADOC comment.

HM.2.1 #2 HS FEDERAL CORRECTIVE ACTION      Hazardous Materials

FINDING ID: HM-JH-02

MANUAL QUESTION NUMBER: HM-002-001

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: INSTALLATION SAFETY OFFICE

IFS FACILITY NUMBER: MULT

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: The Directorate of Public Works and Logistics (DPWL) Refrigeration Shop, Bldg# 1116 did not provide personnel with Hazard Communication (HAZCOM) training. The Biggs Army AirField (BAAF), Test and Evaluation Services Command (TESCO)/DYN Corp. Threat Aviation (Army contractor), Bldg# 11304, was not documenting HAZCOM training.

CRITERIA: Installations are required to have a written hazard communication program and provide personnel with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard is introduced into their work area (29 CFR 1910.1200).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Ensure that all personnel are provided with HAZCOM training as necessary. Document HAZCOM training on DD Form 1556 for each individual and maintain documentation in their work area and in their personnel files. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The Safety Office has scheduled training for DPWL during February 1998. This training (and all future training) will be documented on Form 1556. Documentation of HAZCOM training is checked during DOE quarterly inspections.

TRADOC COMMENT: DD Form 1556 is no longer required, however, it is considered to be the best method of documentation. Recommend adding the following: "Installation Safety Office should

follow-up to ensure training is provided and properly documented."

HM.2.1 #3 HS FEDERAL CORRECTIVE ACTION      Hazardous Materials

FINDING ID: HM-JH-04

MANUAL QUESTION NUMBER: HM-002-001

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: WBAMC

IFS FACILITY NUMBER: 07777

FACILITY TYPE: HOSPITAL & MEDICAL FACILITIES

TENANT NAME: WBAMC

FINDING DESCRIPTION: Several areas at William Beaumont Army Medical Center (WBAMC), Bldg# 7777, did not have adequate emergency eyewash/shower facilities where injurious/corrosive materials were handled. The Cytology Room# 3215, the Radiology Chemical Processing Area, and the Infectious Waste Storage Room# 3170 had inadequate eyewash devices. The flushing streams were uneven and too low on one side and were in need of repair. The Radiology Film Assembly Room# 3362A did not have an emergency shower facility (in addition to the eyewash device that was provided). In this area significant quantities of injurious and corrosive materials may be splashed onto the body of personnel while adding/mixing chemicals.

CRITERIA: Installations must provide for immediate emergency use of suitable facilities for quick drenching and flushing of eyes and body within the work area. Emergency eyewash/shower facilities should be activated at least weekly to verify that they operate properly. The water should be allowed to run at least three minutes to remove stagnant water and any harmful bacteria that may be present in the water supply lines [29 CFR 1910.151 (c)] and American National Standard (ANSI) Z358.1-1990, for emergency eyewash and shower equipment.

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION: Install an emergency shower facility at the Radiology Chemical Processing area. Also, repair the emergency eyewash devices in the Cytology room and Infectious Waste Storage room. Follow the guidance provided in ANSI Z358.1-1990 to maintain equal flushing streams. Establish a program to check emergency eyewash/shower facilities at least weekly to flush

water lines for three minutes to remove potentially harmful bacteria and to ensure that the facilities are functional. Document weekly checks. Estimated Cost: \$2,000.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE  
COST: 2000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS:

HM.2.1 #4 HS FEDERAL CORRECTIVE ACTION      Hazardous Materials

FINDING ID: HM-JH-05

MANUAL QUESTION NUMBER: HM-002-001

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: AAFES

IFS FACILITY NUMBER: 01735

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

TENANT NAME: AAFES

FINDING DESCRIPTION: The Army and Airforce Exchange Service (AAFES) Tire Center at the main Post Exchange (PX), Bldg# 1735, did not have an adequate emergency eyewash device. The plumbed eyewash device that was available for emergency use was being improperly used as a hand-washing device. Soap and a scrub brush were stored in the bowl of the eyewash. This could result in personnel getting soap in their eyes during use of the eyewash device.

CRITERIA: Installations must provide for immediate emergency use of suitable facilities for quick drenching and flushing of eyes and body within the work area. Emergency eyewash/shower facilities should be activated at least weekly to verify that they operate properly. The water should be allowed to run at least three minutes to remove stagnant water and any harmful bacteria that may be present in the water supply lines [29 CFR 1910.151 (c)] and American National Standard (ANSI) Z358.1-1990, for emergency eyewash and shower equipment.

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Prohibit the misuse of the emergency eyewash in the Tire Center. Establish a program to check the emergency eyewash device at least weekly to flush water lines for three minutes to remove potentially harmful bacteria and to ensure that the device is functional. Document weekly checks. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Corrective action has been taken and associates have been trained on the proper use of the eyewash device. The Sales Area Manager will



conduct weekly checks on the operation of the device as prescribed.

HM.2.1 #5 HS FEDERAL CORRECTIVE ACTION      Hazardous Materials

FINDING ID: HM-JH-06

MANUAL QUESTION NUMBER: HM-002-001

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: AAFES

IFS FACILITY NUMBER: MULT

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

TENANT NAME: AAFES

FINDING DESCRIPTION: The Army and Airforce Exchange Service (AAFES) Main Post Exchange (PX), Bldg# 1735, and the AAFES PXtra, Bldg# 1611, did not have copies of Material Safety Data Sheets (MSDSs) readily available on site for chemical products that were stored and handled by personnel. This information is essential for the safe treatment of personnel in the event of a chemical splash. Currently, AAFES personnel are required to dial an (toll-free) 800 number to the AAFES headquarters facility to request an MSDS to be faxed.

CRITERIA: Installations are required to have a written hazard communication program that is designed to provide all employees with information about the hazardous chemicals to which they are exposed to. Copies of chemical inventories [29 CFR 1910.1200 (e)(1)(i)] and training records [29 CFR 1910.1200 (h) (10)] should be available on site. Facilities shall maintain in the workplace copies of the required MSDSs for each hazardous chemical and shall ensure that they are readily accessible during each work shift to employees when they are in their work area [29 CFR 1910.1200 (8)].

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION: Maintain readily available hard copies in the workplace of MSDSs for each hazardous chemical used/stored at all AAFES facilities. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENTS: AAFES has

established a contract with 3E Company, Inc. to maintain a database of Material Safety Data Sheets (MSDS) for all potentially hazardous products used, sold, stored, or transported; by AAFES resources. AAFES activities may contact this service for MSDS information at any time (24hrs/day, 7days/week) using a toll free (800 or overseas equivalent) telephone number. The service will then fax an MSDS back to the AAFES activity when needed. The service is designed to fulfill the OSHA requirements for maintaining readily accessible copies of MSDS at all AAFES activities. OSHA HAZCOM (29 CFR 1910.1200) requires that activities (retail/resale products are exempt from MSDS requirements). Fax or computer access was approved by OSHA as meeting the "readily accessible" requirement in the Federal Register Vol. 59, No. 27 on 9 February 1994. Hard copies of MSDS are no longer required by OSHA and will no longer be maintained by AAFES activities. This service will only be used in case of a spill or emergency; any employee or customer request; or any request from a state regulator, OSHA, ECAMP or ECAS inspector. It is not available for the purpose of maintaining hard copies by AAFES activities or by the installation. This service will enable AAFES activities to maintain better compliance with OSHA requirements.

USACHPPM COMMENTS: The AAFES method for obtaining MSDSs does not meet the requirements of 29 CFR 1910.1200(8). The requirement states that facilities shall maintain in the workplace copies of the required MSDSs for each hazardous chemical and shall ensure that they are readily accessible during each work shift to employees when they are in their work area. The necessity for the MSDSs to be readily accessible to employees is to help ensure the safety of the personnel and customers at the retail establishment in the event of a spill or emergency hazardous materials release. The Health Hazard Data section in MSDSs provides information pertaining to the signs and symptoms of overexposure to the referenced chemical and emergency first aid procedures to employ in the vent of overexposure to the chemical. This information is time sensitive and can dramatically improve the physical and medical outcome of individual(s) affected by the emergency hazardous materials release. The time delay that is created by calling the 24-hour response contractor and receiving the faxed response is inherently hazardous and is easily eliminated by maintaining MSDSs for each workplace hazardous chemical in an area readily accessible to all personnel.

The AAFES method for obtaining MSDSs also does not allow for 24-hour access to the MSDSs. The Environmental Compliance Assessment System (ECAS) assessments of several AAFES facilities show that many of these facilities do not have a facsimile machine located on site. Instead, these sites rely on receiving the MSDS facsimiles from the AAFES Main Exchange located on base. Several service stations (gas stations) that do not have facsimile machines are located in areas that are not in close proximity to the main exchange and/or maintain business hours that differ from the main exchange. The aforementioned conditions render it impossible for these service stations to receive MSDSs on a 24-hour basis.

USACHPPM does not believe that the 3E Program is an effective means of maintaining MSDSs. This decision is based upon the information presented above and consultation with a representative at the Occupational Safety and Health Administration (OSHA). The representative from OSHA stated that MSDS information received over the phone does not adequately meet the requirements of 29 CFR 1910.1200(8). The OSHA representative also explained that the only acceptable way of complying with the requirements of 29 CFR 1910.1200(8) is to maintain hard copies of MSDSs at each individual place of business, to include tenant facilities that are operated under the guidance of a larger facility (e.g. service stations and AAFES Main Exchange). Exceptions to this requirement include small, temporary work sites. The representative from OSHA also stated that he had no knowledge of the 3E Program and that OSHA never endorses any private-sector company.

HM.5.1.TX #1 HS STATE CORRECTIVE ACTION      Hazardous Materials

FINDING ID:    HM-JH-07

MANUAL QUESTION NUMBER:    HM-005-001-TX

FINDING CATEGORY:    HEALTH/SAFETY

FINDING TYPE:    Negative

EXISTING NOV:    NO

LOCATION:    INSTALLATION SAFETY OFFICE

IFS FACILITY NUMBER:    00516

FACILITY TYPE:    ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION:    The Fort Bliss Safety Office does not maintain a complete inventory of all hazardous materials used on post.

CRITERIA:    A workplace chemical list must be compiled and maintained (HSC, Section 502.005).

FINDING COMMENTS:

STATUS OF CORRECTION:    INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION:    The Safety Office must obtain an inventory of all the hazardous materials used on post.

CORRECTIVE ACTION TYPE:    ADMINISTRATIVE OR POLICY CHANGE

COST:    0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS:    INSTALLATION COMMENT:    This finding should be closed out over the next three years as the Hazmart becomes fully operational.    The Safety Office does not have the resources to inventory all hazmats on post.

HM.45.1 #1 HS FEDERAL CORRECTIVE ACTION      Hazardous Materials

FINDING ID: HM-JH-03

MANUAL QUESTION NUMBER: HM-045-001

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: MULT

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Compressed gas cylinders were not secured with a chain or device to prevent them from falling. This deficiency was noted at the following Directorate of Public Works and Logistics (DPWL) facilities: Roads and Grounds Motorpool, behind Bldg# 1073; and Supply, adjacent to Bldg# 2528.

CRITERIA: The in-plant storage, handling, and utilization of all compressed gases in cylinders, portable tanks, rail tankers, or motor vehicles must be done according to the Compressed Gas Association Pamphlet P-1-11965 (29 CFR 1910.101).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Secure the compressed gas cylinders with a chain or device in an appropriate cage or rack designed for that purpose, and replace caps on cylinders when they are not in use. Train personnel in the safe handling and storage of compressed gas cylinders. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Corrective action completed.

## **HAZARDOUS WASTE MANAGEMENT**

The installation Hazardous Waste Program has greatly improved since the last ECAS (1994). Key elements related to this improvement include the initiation of quarterly inspections of hazardous waste accumulation points and the establishment of monthly hazardous waste generator awareness meetings. Significant upgrading of the permitted hazardous waste storage facility, presently operated by the Defense Reutilization and Marketing Office (DRMO), has also contributed to the overall improvement in the installation hazardous waste program. Presently the installation holds Resource Conservation and Recovery Act (RCRA) permits for the hazardous waste storage facility and for an open detonation site located on McGregor Range in New Mexico. The Directorate of Environment (DOE) has a list of approximately seventy hazardous waste accumulation points and nine 90-day storage sites. There are five inactive 90-day sites on the main post. There are three sites at the ranges, which are managed by DOE personnel and are active only for six weeks in May and June during the Roving Sands exercises, and one site at Biggs Army Airfield. The latter site is operated by a contractor (Raytheon) and is active through the year. Thirty-five waste accumulation points and the one active 90-day site were inspected. With few exceptions, the majority of waste generated is managed through DRMO contracts.

The Regulated Medical Waste (RMW) program located on Ft Bliss is well managed. Approximately 140,000 pounds of RMW is generated annually by the William Beaumont Army Medical Center (WBAMC), DENTACs, Veterinary Clinics, and the Troop Medical Clinics. The Environmental Services Branch located at WBAMC coordinates the collection and disposal of all RMW on Ft Bliss. WBAMC has contracted with the company Med-Compliance. Med-Compliance makes 3 pick-ups a week. All necessary paperwork associated with disposal and destruction of RMW is well maintained and accessible. Containers used to transport and store RMW are clean and properly labeled and are provided by Med-Compliance. Segregation issues are addressed during monthly RMW training sessions.

HW.2.1 #1 I FEDERAL CORRECTIVE ACTION

Hazardous Waste

FINDING ID: HW-KM-03

MANUAL QUESTION NUMBER: HW-002-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: WBAMC/PHARMACY

IFS FACILITY NUMBER: 07777

FACILITY TYPE: HOSPITAL & MEDICAL FACILITIES

TENANT NAME: WILLIAM BEAUMONT AMC

FINDING DESCRIPTION: Hazardous waste was transported on public roads without proper documentation (hazardous waste manifest). William Beaumont Army Medical Center (WBAMC) transports expired pharmaceuticals approximately 5 miles on public roads to the Material Branch located at Biggs Army Airfield (Bldg# 11156). Some pharmaceuticals fall under the Resource Conservation and Recovery Act (RCRA) upon their expiration and must be managed as a hazardous waste. Those expired items must be manifested as required under RCRA if they are to be transported on public roads (40 CFR 262.20).

CRITERIA: A generator who transports, or offers for transportation, hazardous waste for offsite treatment, storage, or disposal must prepare a Manifest... 40 CFR 262.20(a).

FINDING COMMENTS: This finding was identified by a Command Logistic Review Team (CLRT) inspection in April 1995 and December 1996.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: 1) Review the pharmacy inventory and identify those pharmaceutical items which are managed under RCRA when expired. Remove and transport to the Materials Branch (Bldg# 11156) those items from the shelf prior to their expiration. In doing so, hazardous waste manifests will not be required when transported across public roads. 2) Provide hazardous waste training to pharmacy personnel to enable them to identify expired pharmaceuticals which are hazardous waste. Estimated Cost: \$4,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 4000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Expired pharmaceuticals will be stored at a 90-day facility at WBAMC.



Establish a 90-day hazardous waste accumulation site at building #7777. Train hazardous waste handlers in compliance with 40 CFR 265.16. Implement contractor pick-up of expired pharmaceuticals stored at 90-day sites.

HW.2.1 #2 I FEDERAL CORRECTIVE ACTION

Hazardous Waste

FINDING ID: HW-KM-06

MANUAL QUESTION NUMBER: HW-002-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL/POWER PLANT

IFS FACILITY NUMBER: 05898

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: A Hazardous Waste Accumulation Point (HWAP) was not being managed properly. Wastes were not being turned in a timely manner, being labeled properly, or located within a controlled area. There were three drums of used fuel filters which exceeded the 55-gallon limit for HWAPs. The HWAP was also located in an unsecured area outside the control of the DPWL personnel.

CRITERIA: Hazardous Waste Accumulation Points (HWAPs) must meet specific management guidelines. 40 CFR 262.24 (c)(1)

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Provide training to DPWL/Power Plant personnel with regards to the operation and maintenance of HWAP and incorporate this HWAP into the Directorate of Environment (DOE) quarterly inspection schedule. Estimated Cost: \$3,000.

CORRECTIVE ACTION TYPE: TRAINING

COST: 3000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Inspect power plant quarterly. Train power plant personnel in accordance with 40 CFR 265.16 Require personnel to attend monthly hazardous waste generators meetings.

HW.10.1 #1 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-MB-01

MANUAL QUESTION NUMBER: HW-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: 11108

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: The Directorate of Public Works and Logistics (DPWL) DOSS Aviation Maintenance Shop, Bldg# 11108, generated waste from a plastic bead paint stripping operation. This waste had not been tested for applicable hazardous waste characteristics.

CRITERIA: Installations/CW facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11) [June 1995].

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Test the paint stripping waste for applicable hazardous waste characteristics. Estimated Cost: \$1,000 per sample.

CORRECTIVE ACTION TYPE: OTHERS

COST: 1000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Paint stripping waste was sampled the week of 26 Jan 98. Analytical results are expected in early February.

HW.10.1 #2 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-MB-02  
MANUAL QUESTION NUMBER: HW-010-001  
FINDING CATEGORY: CLASS I  
FINDING TYPE: Negative      EXISTING NOV: NO  
LOCATION: DCA  
IFS FACILITY NUMBER: 00820  
FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: One drum of paint waste had been stored for an extended period of time outside of the Auto Craft Shop, Bldg# 820. No hazardous waste determination of the drum contents had been done.

CRITERIA: Installations/CW facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11) [June 1995].

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE  
CORRECTIVE ACTION: Test paint waste for applicable hazardous waste characteristics. Estimated Cost: \$1,000. Add this activity to the Directorate of Environment (DOE) list of quarterly site inspections. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE  
COST: 1000  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Hazardous waste determination was done by process knowledge and the waste was turned in to DRMO or disposal. Corrective action completed.

TRADOC COMMENT: The root cause for this finding of "lack of funds for compliance" may indicate a much larger systemic problem with the MWR Auto Craft Shop.

USACHPPM COMMENT: Root cause code has been changed.

HW.10.1 #3 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-MB-04

MANUAL QUESTION NUMBER: HW-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: INST

IFS FACILITY NUMBER: INST

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: There was little coordination between Ammunition Supply Point (ASP), Range Control, and Directorate of Environment (DOE) personnel relating to the management of spent munitions that are taken off the ranges excluding those that are managed as scrap metal.

CRITERIA: Installations/CW facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11) [June 1995].

FINDING COMMENTS: The spent M5HC smoke pot has been determined, by several sources, to be a hazardous waste (D008).

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Determine what types of spent munitions are taken off the ranges and potentially disposed at the installation landfill. Collect and sample these munitions and analyze them for hazardous waste characteristics. Estimated Cost: \$1,000.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 1000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Implementing corrective action.

TRADOC COMMENT: The lead for this is not DOE but DPW-L. DOD and the EPA are still negotiating the definition of a spent munition and when does the munition become waste.

USACHPPM COMMENT: Troop units that expend M5-HC smoke pots during training are required to police the training area. The spent smoke pots are either placed in a range dumpster for disposal in a RCRA-D landfill or in rare cases they are returned to the ASP Residue Yard. Since the smoke pot may exhibit the hazardous waste characteristic of toxicity, this solid waste must be characterized and managed accordingly. A USACHPPM study completed in January

1998, recommends that spend M5-HC smokes be managed as hazardous once they are removed from the training range.

HW.10.1 #4 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-MB-05  
MANUAL QUESTION NUMBER: HW-010-001  
FINDING CATEGORY: CLASS I  
FINDING TYPE: Negative      EXISTING NOV: NO  
LOCATION: DPWL ENTOMOLOGY SHOP  
IFS FACILITY NUMBER: 01235  
FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: An unlabeled drum of unidentified waste was stored in the Directorate of Public Works and Logistics (DPWL) Pesticide Storage Bldg# 1235. Entomology personnel had no information on the contents of the drum. The drum had been in storage for more than ten years.

CRITERIA: Installations/CW facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11) [June 1995].

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED  
CORRECTIVE ACTION: Test contents of the unlabeled drum for hazardous waste characteristics and manage accordingly. Estimated Cost: \$2,000.

CORRECTIVE ACTION TYPE: OTHERS  
COST: 2000  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Sampling and analysis scheduled for February 1998.

HW.10.1 #5 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-KM-04

MANUAL QUESTION NUMBER: HW-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: WBAMC/MATERIALS BRANCH

IFS FACILITY NUMBER: 11156

FACILITY TYPE: HOSPITAL & MEDICAL FACILITIES

TENANT NAME: WILLIAM BEAUMONT AMC

FINDING DESCRIPTION: Hazardous waste was being disposed of improperly. William Beaumont Army Medical Center (WBAMC) returns expired pharmaceuticals to "Easy Returns" for cash credits. These items are either recycled or destroyed. Several expired pharmaceuticals fall under the Resource Conservation and Recovery Act (RCRA) and must be managed as hazardous waste. A hazardous waste manifest was not being completed identifying "Easy Returns" as the waste recipient for those expired items which were hazardous waste.

CRITERIA: Installations/CW facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11) [June 1995].

FINDING COMMENTS: A list of medical items which are hazardous waste when expired or discarded is being provided to the Material Identification and Examiner Officer.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Determine which pharmaceuticals need to be managed as hazardous waste upon their expiration. Return these items to Easy Return before they expire. If the items have exceeded their holding times, manage and turn them in as hazardous waste. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Return hazardous pharmaceuticals to contractor before expiration dates. Manage expired hazardous pharmaceuticals as hazardous waste, including requirements for manifests.



HW.10.1 #6 I FEDERAL CORRECTIVE ACTION

Hazardous Waste

FINDING ID: HW-KM-05

MANUAL QUESTION NUMBER: HW-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL/POWER PLANT

IFS FACILITY NUMBER: 05898

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: There was one full, unlabelled drum located at the DPWL/Power Plant Hazardous Waste Accumulation Point (HWAP). All waste containers should be clearly labeled "Hazardous Waste" or with the contents of the drum.

CRITERIA: Installations/CW facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11) [June 1995].

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Determine the contents of the drum and label the drum accordingly. If the contents of the drum cannot be identified, determine whether or not the drum contents exhibit any characteristic of hazardous waste as detailed under 40 CFR 261.20 and dispose accordingly. Estimated Cost: \$1,500.

CORRECTIVE ACTION TYPE: OTHERS

COST: 1500

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The drum was marked for contents, as determined by process knowledge. Corrective action completed.

HW.55.5 #1 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-KM-01

MANUAL QUESTION NUMBER: HW-055-005

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: WBAMC/RADIOLOGY

IFS FACILITY NUMBER: 07777

FACILITY TYPE: HOSPITAL & MEDICAL FACILITIES

TENANT NAME: WILLIAM BEAUMONT AMC

FINDING DESCRIPTION: Hazardous waste manifests maintained in the radiology department were incomplete. The radiology department had contracted R.P. Kincheloe Co. for pickup and disposal of used X-ray fixer in exchange for fresh fixer for all Ft Bliss medical activities. A hazardous waste manifest was filled out during pick-up. However, a signed and dated copy of a completed manifest was not being sent back to Radiology after the used fixer had been delivered to the Treatment, Storage, Disposal Facility (TSDF). The contractor makes one pick-up a week. Only three completed manifests were noted in the 1996 and 1997 files.

CRITERIA: Generators are required to use manifests, file manifest exception reports, and maintain records (40 CFR 262.40(b), 262.40(d), and 262.42(a)).

FINDING COMMENTS: The current person maintaining oversight of the disposal contract was unaware of the requirements for completed manifests to be returned to the generator. Resource Conservation and Recovery Act (RCRA) training on their part would have prevented this finding. By transferring control of the contract over to the Material Identification and Examiner Officer, all hazardous waste disposal will fall under one persons oversight.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Call R.P. Kincheloe for copies of the completed manifests and transfer control and oversight of this contract over to the Material Identification and Examiner Officer. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Transferred

contract oversight to Material Identifier/Examiner Officer.  
Called to obtain copies of manifest. Maintain manifest files in  
the future.

HW.70.4 #1 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-KM-02

MANUAL QUESTION NUMBER: HW-070-004

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: WBAMC/CLINICAL LAB

IFS FACILITY NUMBER: 07777

FACILITY TYPE: HOSPITAL & MEDICAL FACILITIES

TENANT NAME: WILLIAM BEAUMONT AMC

FINDING DESCRIPTION: Waste Acetonitile (ACN) was improperly stored. Waste ACN (approximately 200-300 ml at a time) was placed in an uncovered container and placed in a laboratory fume hood where it was allowed to evaporate to dryness.

CRITERIA: Containers at generators must be closed during storage and handled in a safe manner (40 CFR 262.34(a)(1)(i) and 265.173).

FINDING COMMENTS: By allowing the ACN to evaporate to dryness, the clinical lab is treating a hazardous waste without a permit as described under 40 CFR 262.10.

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Collect waste acetonitrile in closed containers then turn it in as hazardous waste. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Implementation of corrective action. Written procedure is in effect.

HW.105.1 #1 I FEDERAL CORRECTIVE ACTION      Hazardous Waste

FINDING ID: HW-MB-03

MANUAL QUESTION NUMBER: HW-105-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: 41ST EOD

IFS FACILITY NUMBER: 11000

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The 41st EOD, who operate the permitted Open Detonation Pit at McGregor Range, were not maintaining inspection and training records as required by the Resource Conservation and Recovery Act (RCRA) Part B permit.

CRITERIA: All permitted TSDFs are required to meet the hazardous waste management requirements outlined in their permit (40 CFR 270.10 and 270.30 through 270.33). This includes maintaining inspection and training records in accordance with 40 CFR 264.15 & .16.

#### FINDING COMMENTS:

STATUS OF CORRECTION: CONSTRUCTION/IMPLEMENTATION OF CORRECTIVE ACTION

CORRECTIVE ACTION: Establish recordkeeping practices with the assistance of the Directorate of Environment (DOE). Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Implementing corrective action.

## **NATURAL RESOURCES PROGRAM**

The Natural Resources program at Fort Bliss is much improved since the previous Environmental Compliance Assessment System (ECAS). While findings were noted for a lack of approved Endangered Species Management Plans (ESMP) and the Integrated Natural Resources Management Plan (INRMP), it was noted that these plans are on schedule for completion in the near future. Overall, a positive finding was recorded for the Natural Resources program. This positive finding highlights the exceptional work generated with the Geographic Information System (GIS) and satellite imagery, the work being conducted by the Integrated Training Area Management (ITAM) program, and the exceptional and highly trained natural resources staff.

NR.1.3.A #1 III ARMY/DOD CORRECTIVE ACTION Natural Resource

FINDING ID: NR-TS-02

MANUAL QUESTION NUMBER: NR-001-003-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The Integrated Natural Resources Management Plan (INRMP) had not yet been completed for Fort Bliss. This plan needs to address specific natural resources management issues as outlined by Army Regulation and the recently reauthorized Sikes Act. A draft INRMP has been prepared and needs to be finalized.

CRITERIA: Installations meeting size and natural resource base requirements are required to have an INRMP that meets specific criteria (AR 200-3, para 2-2a and Chapter 9 and DODI 4715.3, para D2(b), D2(h) and Enclosure 7) [December 1996]. The recently reauthorized Sikes Act (PL 105-85) requires preparation and implementation of an INRMP.

FINDING COMMENTS: It should be noted that the INRMP, as a component plan of the Master Plan and associated Environmental Impact Statement (EIS, under preparation, see finding 01-TS-04), must be completed and available for public review by the end of this fiscal year to accommodate the schedule for the Master Plan EIS. It should also be noted that MACOM environmental "must fund" project requirements outlined in the five-year INRMP must reflect MACOM policy for approval. INRMP costs have been previously provided through the Environmental Program Review (EPR) process.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Complete INRMP in accordance with reauthorized Sikes Act requirements. Plan will require approval by Major Command (MACOM). Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The mission and Master Plan EIS including the INRMP will be finalized by August 1998.

TRADOC COMMENT: Recommend adding the following statement: "DA policy regarding description of projects required for the INRMP implementation is in flux. Subsequently, requested INRMP projects will likely be excessive and will require close coordination with the MACOM."



NR.1.12.A #1 III ARMY/DOD CORRECTIVE ACTION Natural Resource

FINDING ID: NR-TS-01

MANUAL QUESTION NUMBER: NR-001-012-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Cooperative plans between Fort Bliss, US Fish and Wildlife Service, and the State agencies of Texas and New Mexico charged with management of fish and wildlife resources had never been finalized. Prior attempts to enter into cooperative agreements were not approved at the Major Command (MACOM) level due to specific project commitments. However, cooperative plans do not require specific project commitments, only an agreement between installation and agencies regarding a program of planning for, and the development, maintenance, and coordination of wildlife, fish and game conservation.

CRITERIA: Cooperative agreements entered into with other entities to provide for the maintenance and improvement of natural resources must contain specific language (DODI 4715.3, para F1(e)) [December 1996]. AR 200-3, para 6-4 requires a Fish and Wildlife Cooperative plan, as authorized by the Sikes Act (16 USC 670a).

FINDING COMMENTS: Recent reauthorization of the Sikes Act will now require the INRMP to represent the cooperative plan.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Recent passage of the Sikes Act eliminates need for cooperative plan in lieu of preparing and implementing an Integrated Natural Resource Management Plan (INRMP, see finding NR-TS-02). No corrective action or cost is associated with this finding.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The mission and Master Plan EIS including the INRMP will be finalized by August 1998.

NR.20.2.A #1 III ARMY/DOD CORRECTIVE ACTION Natural Resource

FINDING ID: NR-TS-03

MANUAL QUESTION NUMBER: NR-020-002-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Endangered Species Management Plans (ESOPs) had not been finalized for several federally listed species found on Fort Bliss. Army Regulation requires ESOPs to be completed and approved by the Installation Commander within one year of discovery. National Environmental Policy Act (NEPA) evaluation is required to implement ESOPs, ideally incorporated within the Master Plan Environmental Impact Statement process.

CRITERIA: Installations are required to produce Endangered Species Management Plans (ESOPs) for listed and proposed species and critical habitat present on the installation (AR 200-3, para 11-5, 11-6f) [February 1996].

FINDING COMMENTS: As with Integrated Natural Resources Management Plan, ESOPs must be completed concurrent with scheduled completion of the Master Plan Environmental Impact Statement prior to the end of this fiscal year. Scheduled completion and approval of ESOPs is February 98. Funding had been previously provided from the Major Command (MACOM) to complete ESOPs. If subsequent informal consultation with the Fish and Wildlife Service (FWS) results in a "may affect" determination, a Biological Assessment and formal consultation with FWS will be required.

STATUS OF CORRECTION: CONSTRUCTION/IMPLEMENTATION OF CORRECTIVE ACTION

CORRECTIVE ACTION: Finalize ESOPs for installation commander approval. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Corrective action implemented. Very near completion.

NR.1.7.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Natural Resource

FINDING ID: NR-TS-04

MANUAL QUESTION NUMBER: NR-001-007-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The Natural Resources Management Program is much improved since the previous Environmental Compliance Assessment System (ECAS) and worthy of a positive finding. Noteworthy items identified during this assessment included exceptional use of Geographic Information System and satellite imagery technology, and use of some innovative land rehabilitation techniques as part of the Integrated Training Area Management (ITAM) program. The exceptional Natural Resources Staff assembled since the previous ECAS have done much to advance this program resulting in an overall positive finding.

CRITERIA: Personnel assigned duties in natural resources are required to have the appropriate knowledge, skills, professional training, and education to carry out their responsibilities (DODI, 4715.3, para D1(j)) [December 1996].

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

## **ENVIRONMENTAL IMPACTS**

The National Environmental Policy Act (NEPA) program at Fort Bliss, though improved from the last Environmental Compliance Assessment System (ECAS) is still in need of some significant improvement. Many more projects are now reviewed in accordance with NEPA compared with past years. This has been facilitated by designating a single NEPA coordinator. However, it was clear during this assessment that required NEPA analysis is often neglected. This appears to be in part due to a lack of clear guidance from the Directorate of Environment to activities that review projects and work orders. It was noted that 131 projects reviewed in 1997 represented a relatively low number of projects considering the size and scope of activities at Fort Bliss. Another concern was that five of the six NEPA findings identified were repeats from the previous ECAS. In addition to a Class 1 finding for projects lacking review IAW NEPA, two Class 2 findings were noted for a lack of a program to track mitigation commitments and to highlight the importance of completing the Master Plan Environmental Impact Statement (EIS) prior to completion of the McGregor Range Withdrawal EIS. Finally, Class 3 findings were noted for the need for formal NEPA training, incomplete NEPA documentation in files, and for improper signatures on NEPA documentation.

01.5.1 #1 I FEDERAL CORRECTIVE ACTION

Environmental Impacts

FINDING ID: 01-TS-03

MANUAL QUESTION NUMBER: 01-005-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Despite commendable efforts by the environmental staff to fully evaluate all actions in accordance with National Environmental Policy Act (NEPA), some projects still proceed unreported or inadequately reported to Directorate of Environment(DOE) personnel. Recent examples include the Tobin Wells expansion of missile lanes 6 and 7, the landscaping project around historic Building #1, and a variety of other projects concerning historic structures.

CRITERIA: The NEPA process must be integrated into planning for projects at the installation/CW facility as early as possible in order to prevent delays in project implementation (40 CFR 1501.1 and 1501.2).

FINDING COMMENTS: It was noted that only 131 projects had been reviewed for NEPA compliance during the current calendar year (through 11 Dec), with approximately half of these requiring a Record of Environmental Consideration (REC). This represented approximately 1/4 of the RECs this reviewer has typically seen at other installations, all considerably smaller than Fort Bliss. It appears as if DOE personnel have often received inadequate information (work orders) from Directorate of Public Works and/or Contracting personnel. There has historically been a lack of clear guidance from DOE on the types of projects that require review. Though historically a non-litigious environment, there was some concern regarding the presence in the region of some environmental groups that may focus on Fort Bliss activities. Fort Huachuca had become one of those foci, at considerable cost and manpower.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Increase awareness of activities at Fort Bliss on the necessity/need to inform DOE early in planning processes of proposed projects. Provide clear guidance on the types of projects that require review. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree. DPWL agreed to provide DOE all project lists and subsequent work orders. DOE will implement an installation-wide training program to supplement the NEPA SOP.

01.5.3 #1 II FEDERAL CORRECTIVE ACTION      Environmental Impacts

FINDING ID: 01-TS-04

MANUAL QUESTION NUMBER: 01-005-003

FINDING CATEGORY: CLASS II

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The Fort Bliss Ongoing Mission and Master Plan (MP) Environmental Impact Statement (EIS) had not been completed. The previous EIS from 1984 is inadequate.

CRITERIA: An installation/CW facility must produce an EIS if certain conditions exist due to a proposed action (40 CFR 1501.4(a), 1501.4(c), and 1502.4).

FINDING COMMENTS: It is essential this MP EIS be completed on schedule with the McGregor Range Withdrawl EIS which is scheduled for review in late calendar year 1998.

STATUS OF CORRECTION: CONSTRUCTION/IMPLEMENTATION OF CORRECTIVE ACTION

CORRECTIVE ACTION: Complete EIS on schedule. Since project previously funded, Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree. In progress and on schedule.

01.5.12.A #1 II FEDERAL CORRECTIVE ACTION Environmental Impacts

FINDING ID: 01-TS-01

MANUAL QUESTION NUMBER: 01-005-012-A

FINDING CATEGORY: CLASS II

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: No formal system had been established at Fort Bliss to track mitigation requirements outlined in National Environmental Policy Act (NEPA) documentation. NEPA-committed mitigation represents a legal requirement that must be tracked to ensure compliance.

CRITERIA: Installations are required to implement mitigation and/or other considerations established in the Environmental Assessment (EA) or Finding of No Significant Impact (FNSI, AR 200-2, para 2-7a and para 2-7d).

FINDING COMMENTS: While only minor projects have required monitoring since the last Environmental Compliance Assessment System (ECAS), this finding is of particular importance with the significant Environmental Impact Statements (Master Plan and McGregor Withdrawal) due out within fiscal year 98.

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Establish a formal procedure to ensure that committed mitigation measures are completed. NEPA coordinator must outline past and future committed requirements and schedule compliance assessments for projects. Project design checks will facilitate ensurance of mitigation compliance. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The database for tracking mitigation measures is operational. The database includes mitigation required for all EA's during the past 5 years, as well as 1997 CX/REC's. NEPA standard operating procedures revised to address mitigation tracking. Corrective action completed.



01.1.2.A #1 III ARMY/DOD CORRECTIVE ACTION Environmental Impacts

FINDING ID: 01-TS-02

MANUAL QUESTION NUMBER: 01-001-002-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The Fort Bliss National Environmental Policy Act (NEPA) Coordinator had not participated in a formal NEPA training course. Formal training will facilitate implementation of the NEPA program and ensure compliance.

CRITERIA: Management and organization of paperwork, materials, and personnel should be done in a manner that prevents noncompliance and recurrence of noncompliance, precludes/minimizes regulatory enforcement actions (including warning letters etc.) promotes good public relations, and addresses systemic weaknesses in the overall operation of the program (MP).

FINDING COMMENTS: The number of significant NEPA actions currently ongoing highlights the importance of ensuring the NEPA coordinator is highly trained in current methodologies.

STATUS OF CORRECTION: CONSTRUCTION/IMPLEMENTATION OF CORRECTIVE ACTION

CORRECTIVE ACTION: Have NEPA coordinator and other environmental staff, as required, attend weeklong NEPA class and periodic NEPA seminars. Estimated Cost: \$10,000 per individual.

CORRECTIVE ACTION TYPE: TRAINING

COST: 10000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree. In progress.

01.5.8.A #1 III ARMY/DOD CORRECTIVE ACTION Environmental Impacts

FINDING ID: 01-TS-06

MANUAL QUESTION NUMBER: 01-005-008-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Recent National Environmental Policy Act (NEPA) documentation including Environmental Assessments (EAs) and associated Findings of No Significant Impact (FNSIs) have been signed by the Environmental Chief. Signatory authority is the responsibility of the installation commander.

CRITERIA: The EA, the FNSI, and all other appropriate planning documents will be provided to the appropriate decision-maker for review and consideration. The signature page for the EA and the FNSI package will be signed by the appropriate decision-maker to indicate his or her review and approval (AR 200-2, para 5-4b). This policy has been clarified through memoranda from HQDA (20 Dec 91) and endorsed by HQ TRADOC (14 Feb 92).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: All future EAs, Environmental Impact Statements (EISs), and FNSIs require the installation commander's signature as the approver or joint approver. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Proponents of current EA's were notified regarding Commander's signature. All future EA's, EIS's, and FONSI's will be signed by the Installation Commander. Corrective action completed.

01.5.16.A #1 III ARMY/DOD CORRECTIVE ACTION Environmental Impacts

FINDING ID: 01-TS-05

MANUAL QUESTION NUMBER: 01-005-016-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Environmental Assessment (EA) files reviewed since the previous ECAS were incomplete in a number of areas. Specifically, no formal affidavits of publication were contained in any files, in one instance no copy of the Notice of Availability (NOA) was found (Loop 375 EA), and one file contained the public notice with no indication of the date of publication or the newspaper (Hazmart EA). Also, some files lacked signed copies of the EA and associated Finding of No Significant Impact (FNSI, Paladin EA, Loop 375 EA, Site 10 Road EA).

CRITERIA: Specific records must be maintained in certain circumstances (AR 200-2, para 3-1).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Maintain complete administrative records for future actions. Request formal affidavits of publication of FNSI documentation from newspapers. Maintain original signed copies of all NEPA documentation in files. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Ensure that future NEPA files are complete. Corrective action completed.

## **ENVIRONMENTAL NOISE**

The four negative and one positive findings are a clear indication of the need to improve the Fort Bliss Environmental Noise Program. The Fort Bliss Draft Environmental Noise Management Plan is incomplete and missing critical environmental noise contours for current and future operations. The Biggs Army Airfield needs to maintain operational data for aircraft operations to develop environmental; noise contours. The lack of an adequate Environmental Noise Program does not result in civil/criminal penalties, however, it can create situations that reduce and impact the installations operational capabilities. These reductions in operations are a direct result of public and political pressures to reduce the installations noise producing operations.

O2.1.3.A #1 III ARMY/DOD CORRECTIVE ACTION Environmental Noise

FINDING ID: O2-DB-004

MANUAL QUESTION NUMBER: O2-001-003-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00515

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The current Fort Bliss Environmental Noise Management Plan (ENMP), (October 1997), was in draft and should be finalized. The environmental noise contours for Biggs Army Airfield (BAAF) and Fort Bliss ranges need to be updated to reflect current and future operations at these facilities. Fort Bliss needs to include these updated environmental noise contours for BAAF and range operations in the Environmental Noise Management Plan (ENMP). Any future activities that may affect the noise environment, including the Joint Use BAAF and El Paso International Airport proposal must also be addressed. These types of noise generating proposals can have long term significant impacts on both civilian and Fort Bliss land use planning.

CRITERIA: Installations are required to continually evaluate the impact of noise that may be produced by ongoing and proposed Army actions/activities (AR 200-1, para 7-2c, 7-2d, 7-5a) [January 1997].

FINDING COMMENTS: Although the environmental noise impact of Fort Bliss is not creating a significant problem today, this can change with future changes in land use or missions (i.e., the proposed joint use of BAAF). The primary purpose of the ENMP is to identify existing land use incompatibilities and prevent conflicts, both on-post and off-post.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Update the ENMP to include current and future mission changes and proposals. Estimated cost is \$7,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 7000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: If year-end funds are available to update the ENMP.

TRADOC COMMENT: The root cause identified a potential serious problem in the Fort Bliss environmental program. Contract oversight to ensure the government receives the product from the contract is a critical element.

O2.1.7.A #1 III ARMY/DOD CORRECTIVE ACTION Environmental Noise

FINDING ID: O2-DB-003

MANUAL QUESTION NUMBER: O2-001-007-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: AVIATION DIV

IFS FACILITY NUMBER: 11210

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Although Biggs Army Airfield (BAAF) was maintaining some operational data, it was not adequate to produce environmental noise contours. These data, listed in Army Regulation (AR) 200-1, para 7-5f, includes flight track locations, altitudes along the flight tracks, arrival and departure patterns, specific type of aircraft (e.g., UH-60, CH-53, UH-1, C-130, C-5A, etc.) and the number of daytime and nighttime operations by aircraft type along each flight track.

CRITERIA: Installations are required to maintain operational data on noise producing activities (AR 200-1, para 7-5f).

FINDING COMMENTS: Accurate environmental noise contours cannot be generated using the data currently collected. Without environmental noise contours to support the ENMP, land uses around the airfield will continue to become incompatible with the noise environment.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: The required operational data should be collected and maintained so that accurate environmental noise contours can be generated for BAAF. The environmental noise contours for BAAF should be incorporated into the Fort Bliss Environmental Noise Management Plan (ENMP) and Installation Master Plan. Estimated Cost: \$ minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: TRADOC COMMENT: The root cause for this finding does not correspond with the suggested corrective action. Training does not seem to the issue but lack of an SOP or checklist for airfield personnel to guide collection of operational data.

O2.1.10.A #1 III ARMY/DOD CORRECTIVE ACTION Environmental Noise

FINDING ID: O2-DB-005

MANUAL QUESTION NUMBER: O2-001-010-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: PUBLIC AFFAIRS OFFICE

IFS FACILITY NUMBER: 00015

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: Fort Bliss has an informal noise complaint procedure that should channel all noise complaints to the Public Affairs Office (PAO). However, not all noise complaints that are received at Biggs Army Airfield and Range Control are referred to the PAO. The PAO does investigate each complaint to establish cause, notifies responsible activities and responds back to the complainant. Copies of the noise complaints should be provided to the installation environmental noise committee for review or recurring noise complaints.

CRITERIA: Installations must institute a noise complaint procedure (AR 200-1, para 7-2f) [January 1997].

FINDING COMMENTS: Army Regulation 200-1 designates the PAO as the preferred Point of Contact for all noise complaints. Noise complaints that are received by Fort Bliss should be referred to the PAO.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Develop a written Fort Bliss regulation/Standard Operating Procedure that outlines the goals and responsibilities of managing noise complaints and provides guidance for logging, investigating, and responding to noise complaints. This management would include possible mitigation of the noise sources. Estimated Cost: \$ minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: In progress.



02.2.1.A #1 III ARMY/DOD CORRECTIVE ACTION Environmental Noise

FINDING ID: 02-DB-001

MANUAL QUESTION NUMBER: 02-002-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPTMS

IFS FACILITY NUMBER: INST

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Personnel associated with the Environmental Noise Program have not been trained in environmental noise abatement and management. Personnel within the Environmental Noise Program should be trained to have a basic understanding of environmental noise and the Army's noise program.

CRITERIA: Management of paperwork, materials and personnel should be done in a manner that prevents noncompliance, recurrence of noncompliance and that precludes Notices of Violation (NOV's), letters of citation, promotes good public relations and addresses systemic weaknesses in the overall operation of the program (MP).

FINDING COMMENTS: Attendees for training should include Environmental, Public Affairs Office, Biggs Army Airfield and Range Control operations, Master Planning, and Staff Judge Advocate personnel.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Environmental noise training should be provided to all personnel associated with environmental noise management. Fort Bliss should request HQ TRADOC to sponsor a TRADOC environmental noise workshop. The cost of this training, would be related to number of personnel trained and TDY costs. The estimate should be based on 6 personnel at 5 days TDY (airfare and per diem). Estimated Cost: \$6,000.

CORRECTIVE ACTION TYPE: TRAINING

COST: 6000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE does not have funds to provide noise training.

TRADOC COMMENT: The finding description section does not address the specific issue where the Fort Bliss Noise Program is not being managed properly to preclude non-compliance. The criteria section does not specify a requirement for training of personnel.

Recommend deletion of finding. The recommendation for HQ TRADOC to sponsor a TRADOC environmental noise workshop is inappropriate and has no relationship to the finding.

O2.1.7.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Environmental Noise

FINDING ID: O2-DB-002

MANUAL QUESTION NUMBER: O2-001-007-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: 1ST CAS BN

IFS FACILITY NUMBER: 09501

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The Range Control Office collected and maintained firing range operational data in an organized, comprehensive and "State of the Art" manner. These detailed operational data allowed for the generation of accurate environmental noise contours for the Fort Bliss ranges.

CRITERIA: Installations are required to maintain operational data on noise producing activities (AR 200-1, para 7-5f).

FINDING COMMENTS: The data collection model used by Range Control collected and maintained all the data required to generate environmental noise contours for the ranges. This model should be shared with other installations so that they can collect the required data needed to improve the accuracy of the environmental noise contours.

STATUS OF CORRECTION:

CORRECTIVE ACTION: Continue to collect and maintain the operational data.

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding.

## **Installation Restoration Program**

The assessment of the Installation Restoration Program (IRP) involved the review of the Installation Action Plan (IAP), Cost To Complete, Environmental Program Review (EPR), and Defense Sites Environmental Restoration Tracking System (DSERTS). Data integration problems had been identified previously by TRADOC as being systemic. Therefore, it was an area of considerable focus. Site visits were conducted for several sites where current investigation cleanup efforts had been underway. A line item review was conducted for work completed and works scheduled for this year. The status of current funding was reviewed and assistance was given in development of an installation based IRP Master work plan.

Two IRP ECAS findings were developed. The first identified a lack of adequate access control at IRP sites. The second recognized partnering efforts with state regulators, public, and the Corps of Engineers.

The Fort Bliss IRP has much improved over the last couple of years and was in fairly good shape overall. Continued emphasis on partnering efforts is crucial to the success of the program. Also, there was a need for development of installation standards in addressing the various sites and activities.

03.1.6 #1 III FEDERAL CORRECTIVE ACTION      IRP

FINDING ID: 03-JG-01

MANUAL QUESTION NUMBER: 03-001-006

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: MULT

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Several sites tracked under the Army Installation Restoration Program (IRP) lack sufficient signage or other institutional controls to deter unauthorized access. Approximately 43 IRP sites are located in areas that are unsecured. Some of these sites contain surface contaminants which may be harmful to humans. Affected sites include sites tracked under the Defense Site Environmental Restoration Tracking System (DSERTS). DSERTS site numbers include: FTBL-001 through FTBL-016, FTBL-021,022,023,028-037,043,044,045,047,049,051, FTBL-070 to 073, 075,and FTBL-078 to through FTBL-080.

CRITERIA: When a Remedial Investigation/Feasibility Study (RI/FS) is done to assess site conditions and evaluate alternatives, specific tasks are required as a part of the RI/FS (40 CFR 300.430 (a)(2)) [May 1996]. [ "Treatment of the principal threats posed by a site, with priority placed on treating waste that is liquid, highly toxic or mobile, will be combined with engineering controls as appropriate for treatment of residuals and untreated waste (40 CFR 300.430.a.iii.c)]

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Complete review of all IRP sites. Estimated Cost: Minimal cost. Sites with potential public access should have appropriate signage placed around the perimeter to control access. Estimated Cost: \$100/sign. Sites thought to have hazardous contaminants present at or near the surface need to have security measures implemented. Erection of access gates or fencing may be warranted. Estimated Cost: Less than \$100,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 101000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE requested funds from the DERP to complete the corrective action.

O3.1.2.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION IRP

FINDING ID: O3-JG-02

MANUAL QUESTION NUMBER: O3-001-002-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Fort Bliss has established a Restoration Advisory Board (RAB) and has now formally introduced public participation into its decision making process regarding the Installation Restoration Program (IRP). The RAB has representation from both Texas and New Mexico and meets quarterly to discuss cleanup issues. Additionally, Fort Bliss IRP program manager has recently developed a Memorandum of Agreement between Fort Bliss and the Fort Worth District to clarify roles and responsibilities. This is a big improvement over past years when communication and coordination was very poor.

CRITERIA: Management and organization of paperwork, materials, and personnel should be done in a manner that prevents noncompliance and recurrence of noncompliance, precludes/minimizes regulatory enforcement actions (including warning letters etc.) promotes good public relations, and addresses systemic weaknesses in the overall operation of the program (MP).

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION: Continue partnering efforts with the State of Texas and New Mexico to build a closer relationship. Continue to build upon the much improved relationship with the Fort Worth District COE in developing and maintaining Fort Bliss short range and long range cleanup plans. Estimated Cost: Minimal

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding.

### **Pollution Prevention Summary**

Fort Bliss has an active pollution prevention (P2) program that has implemented several proactive pollution prevention projects to include the development of a centralized hazardous material control center scheduled to open on February 3, 1999. Fort Bliss is currently reevaluating their P2 program and has contracted to have their current pollution prevention plan incorporated into an Integrated Pollution Prevention Plan. The development of a comprehensive plan is a bold initiative that will give Fort Bliss's pollution prevention program a prioritized implementation plan for waste prevention and reductions. When complete this plan will produce a multi-media integrated action plan for the following media areas: ozone depleting chemicals, hazardous material use/reduction, hazardous waste disposal, municipal solid waste management, potable water conservation, affirmative procurement, and recycling opportunities.

The one deficiency identified in the pollution prevention program was the lack of an installation wide affirmative procurement program that would assure the purchasing of EPA guideline items containing recycled content materials. The proponent for this program should be the Director of Contracting with technical support provided by DOE.

04.1.15.A #1 III ARMY/DOD CORRECTIVE ACTION Pollution Prevention

FINDING ID: O4-PA-02

MANUAL QUESTION NUMBER: O4-001-015-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: INST

IFS FACILITY NUMBER: INST

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Used oil filters are not being crushed and recycled as scrap metal.

CRITERIA: Pollution prevention will occur at installations through prevention, reduction, reuse, and treatment (AR 200-1, para 4-2c, 4-2d, and 102c) [January 1997].

FINDING COMMENTS: Oil filter crushers have been successfully implemented at many Army installations. This action will reduce compliance liability for improper draining of oil filters at motorpool operations.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Fort Bliss should purchase automotive oil filter crushers for all motorpools. These filter crushers will ensure that all free liquid is removed from each filter so they can be recycled as scrap metal. Estimated Cost: \$200 to \$500 per filter crusher (Approximately 20 units would be required)

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 10000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE will submit an A106 funding request in the spring of 1998.



O4.5.1.A #1 III FEDERAL CORRECTIVE ACTION Pollution Prevention

FINDING ID: O4-PA-01

MANUAL QUESTION NUMBER: O4-005-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOC

IFS FACILITY NUMBER: INST

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: Fort Bliss procurement process did not have a system to identify and purchase products made from recycled materials.

CRITERIA: Certain procured products must be made from recovered solid waste (RCRA Section 6002, 40 CFR 248 through 253).

FINDING COMMENTS: The General Service Authority has updated it's recycled products catalog. The quality of products have been upgraded for use in standard printing and copying equipment. Product costs are now in line with costs of non-recycled products. These catalogues should be made available to all customers on the installation with accompanying Affirmative Procurement directive.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Establish Director of Contracting (DOC) proponency with coordination and technical assistance from Director of Environment (DOE) for Affirmative Procurement Program. Develop system of ensuring appropriate products are selected during normal procurement procedures. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The group from TRADOC were going to provide assistance with this. DOC will develop a system of ensuring appropriate products during normal procurement procedures after we have received the information as agreed. In the meantime, we will contact TRADOC to find out what SOP's are in place from other DOC's and have something in place by 1 March 1998.

## **PROGRAM MANAGEMENT**

The Fort Bliss environmental program was greatly improved since the last ECAS three years ago. The office was better organized with a clear mission and goals with timelines. Employees were made to account for their time and track their EPR projects. The most recent Roving Sands exercise with 35,000 soldiers participating resulted in no environmental damage requiring mitigation. This was due to the Environmental Office "getting the word out" prior to the exercise, training the participating units, and making sure the exercise areas were clearly marked. The office makes every effort to support the Bliss training mission, which was not the case in the past.

Communication between the Divisions within DOE were fragmented. This has improved since the last ECAS and was partially due to the Divisions not all collocated Information gets to the Director but not to individuals needed some improvement.

There was a significant issue with communications between the DPWL and DOE staffs. The relationship was very contentious and required a major effort on the part of the Directors to resolve.

05.8.2.A #1 III ARMY/DOD CORRECTIVE ACTION Program Management

FINDING ID: 05-SN-02

MANUAL QUESTION NUMBER: 05-008-002-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: 00777

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The Directorate of Environment (DOE) and Directorate of Public Works and Logistics (DPWL) expressed frustration with lack/timely coordination on projects especially those involving historic properties, asbestos and lead based paint. DPWL has requested specific guidance on environmental requirements for historic properties, asbestos and lead based paint. Although asbestos and lead based paint are DPWL responsibilities, DOE should provide them assistance and guidance in these two areas. For historic properties DOE should issue a guidance document outlining all requirements.

CRITERIA: Coordination and support between DPW, DOL, DOC, SJA, and RM should be promoted in order to maintain environmental compliance (MP) [December 1996].

FINDING COMMENTS:

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: DOE should issue clear guidance on specific requirements/notifications required to maintain, renovate, lay away, etc. historic properties. Both Directorates must make every effort to coordinate in a timely manner. DOE should assist the DPWL to ensure projects involving asbestos and lead based paint are executed IAW all regulations.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER: N/A

CORRECTIVE ACTION COMMENTS:

05.8.3.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Program Management

FINDING ID: 05-SN-01

MANUAL QUESTION NUMBER: 05-008-003-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DPTMS

IFS FACILITY NUMBER: 00002

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Previous ECAS this was a negative finding. Communications have been greatly improved since then and merit recognition. DOE had been successful in clearing more areas for training.

CRITERIA: Communication and relationships between the environmental staff and operations personnel should promote environmental stewardship (MP) [December 1996].

FINDING COMMENTS: Investigation and clearing of archeological sites on training ranges was a major Fort Bliss Commanding General initiative as was part of the Environmental Chiefs performance rating.

STATUS OF CORRECTION:

CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

O5.8.7.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Program Management

FINDING ID: O5-SN-03

MANUAL QUESTION NUMBER: O5-008-007-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: Environmental Office had implemented an environmental awards program to recognize those civilians and soldiers on post who demonstrated outstanding environmental stewardship.

CRITERIA: Installations should promote their positive environmental efforts (MP) [December 1996].

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

O5.15.7.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Program  
Management

FINDING ID: O5-SN-04  
MANUAL QUESTION NUMBER: O5-015-007-A  
FINDING CATEGORY: POSITIVE  
FINDING TYPE: Positive EXISTING NOV: NO  
LOCATION: DOE  
IFS FACILITY NUMBER: 00624  
FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The Directorate of Environment (DOE) had implemented the Army Performance Improvement Criteria (APIC) management system. DOE will ultimately go under the international ISO-14001 system.

CRITERIA: Installations should have a methodology to evaluate improvement in environmental programs (MP) [December 1996].

FINDING COMMENTS: Under current management system, DOE personnel track hours spent on each project. All projects have a Ghant chart, milestones, and monthly obligation reports. DOE has ensured all hours are accountable.

STATUS OF CORRECTION:  
CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:  
COST: 0  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

## **Pesticide Management**

The Pest Management Program at Fort Bliss has greatly improved over the last eighteen months. The installation now possesses one of the most complete Installation Pest Management Plans. The Commanding General has issued policy reinforcing the Fort Bliss commitment to safe and responsible chemical usage. The medical monitoring and applicator education standards were also greatly improved.

Unfortunately, out of sixteen negative findings, nine were repeated from the Environmental Compliance Assessment performed three years ago. However, it can be expected that nine labeling and storage findings will be negated over the next three to four months due to improved management practices and the completion of a state-of-the-art pesticide mixing and storage facility on post. Three additional findings from a tenant activity, the El Paso Federal Correctional Institution, will disappear when that facility closes during 1998. Three findings related to non-approved pest management contracts. Meetings were held with DOC to inform them of the necessity that pesticide application contracts be approved by the MACOM Pest Management Consultant. That office agreed to include MACOM approval of pesticide application contracts in the new SOP which is currently being drafted.

The greatest barrier keeping Fort Bliss from being a leader in Army pest management activities is the lack of continuity in program oversight. Although required by Department of Defense Instruction 4150.7 and Army Regulation 420-76, the Installation Commander has not designated and officially appointed on orders an Installation Pest Management Coordinator. This individual is usually multi-hatted, acting as a collection point for pest management information on the installation, serving as a liaison between installation activities, and is the primary point of contact for the MACOM Pest Management Consultant.

Overall, the expectation of the assessor was for continued progress in the Fort Bliss pest management program especially if an Installation Pest Management Consultant is designated.

PM.10.2.TX #1 I STATE CORRECTIVE ACTION      Pesticide

FINDING ID: PM-MLB-05

MANUAL QUESTION NUMBER: PM-010-002-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: GOLF COURSE PESTICIDE MIXING AND STORAGE FACILITY

IFS FACILITY NUMBER: 03007

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Several unlabeled containers (presumably pesticides) were found in the pesticide storage locker containing fungicides.

CRITERIA: Pesticides must be prominently labeled (4 TAC 7.4)  
[Added June 1997].

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Overpack and dispose of unlabeled pesticides by using Defense Re-Utilization Marketing Office or return to manufacturer as identified by visible packaging identification.  
ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Corrective action completed.



PM.1.3.A #1 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-01

MANUAL QUESTION NUMBER: PM-001-003-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: INST

IFS FACILITY NUMBER: INST

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The Installation Commander had not appointed an Installation Pest Management Coordinator (IPMC). The individual should be appointed on orders and given the responsibility to monitor all pesticide usage on the entire installation. This individual would also be responsible for the Installation Pest Management Plan (IPMP), and for ensuring that the DD Form 1532 is completed.

CRITERIA: The installation must have a Pest Management Coordinator (AR 420-76, para 2-4e and 2-8).

FINDING COMMENTS: This appears to be an installation wide systemic problem. Believe correction of this deficiency would greatly decrease the number of findings by creating added oversight for the pest management program.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Identify and appoint on orders an Installation Pest Management Coordinator. This can be a multi-hatted individual but the individual should be placed high enough to function effectively across directorates. This individual should be Department of Defense trained and certified as a Pesticide Applicator and Pest Management Quality Assurance Evaluator.

ESTIMATED COST \$5000/three years. ALTERNATIVE CORRECTIVE ACTION: Hire an entomologist, ESTIMATED COST \$75000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 75000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE is investigating the possibility of appointing a wildlife biologist as Pest Management Coordinator.

PM.1.7.A #1 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-08  
MANUAL QUESTION NUMBER: PM-001-007-A  
FINDING CATEGORY: CLASS III  
FINDING TYPE: Negative EXISTING NOV: NO  
LOCATION: AAFES FOOD SERVICE FACILITIES  
IFS FACILITY NUMBER: MULT  
FACILITY TYPE: HOUSING & COMMUNITY FACILITIES  
TENANT NAME: AAFES FOOD SERVICES

FINDING DESCRIPTION: A contract for the control of pests had been entered into by several AAFES Food Service Activities (i.e. Burger King B1724 & AAFES Food Court B1735). Pest control contracts for work performed on Army installations are required to be reviewed and approved by the cognizant MACOM Pest Management Consultant (PMC). The current AAFES contract has not met this requirement.

CRITERIA: Contracts for installation pest control services must be reviewed and approved prior to advertisement for bid (AR 420-76, para 3-4k, 3-12c, 3-12d, 4-3a, and 4-3c).

FINDING COMMENTS: This is a common deficiency of tenant activities. AAFES agreed to forward copy of the contract to MACOM PMC for review and approval.

STATUS OF CORRECTION:

CORRECTIVE ACTION: Forward copy of pest control contract to MACOM PMC for review and approval. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: AAFES is providing a copy of their pest control contract for MACOM review.

PM.1.7.A #2 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-09

MANUAL QUESTION NUMBER: PM-001-007-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: EL PASO FEDERAL CORRECTIONAL INSTITUTION

IFS FACILITY NUMBER: 11631

FACILITY TYPE: HOUSING & COMMUNITY FACILITIES

TENANT NAME: EL PASO FED CORRECTIONAL INST.

FINDING DESCRIPTION: A contract for pest control services in the Federal Correctional Institution dining facility had been awarded without review and approval by the MACOM Pest Management Consultant (PMC) and was not being monitored by a DOD trained and recognized Quality Assurance Evaluator (QAE).

CRITERIA: Contracts for installation pest control services must be reviewed and approved prior to advertisement for bid (AR 420-76, para 3-4k, 3-12c, 3-12d, 4-3a, and 4-3c).

FINDING COMMENTS: This finding should disappear when the FCI leaves sometime during the next 12 months.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Forward current contract to MACOM PMC for review and approval to ensure that tenets of Integrated Pest Management are used. Appoint a QAE who is trained in pest management to oversee the contract. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Federal Prison is providing a copy of the pest control contract for MACOM review.

PM.1.7.A #3 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-18

MANUAL QUESTION NUMBER: PM-001-007-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DEPARTMENT OF CONTRACTING

IFS FACILITY NUMBER: 02021

FACILITY TYPE:

FINDING DESCRIPTION: Department of Contracting was not aware of the requirement for MACOM review of pest management contracts for services on Army posts. Pest management contracts have been awarded without MACOM approval. Pest management services had been procured using government credit cards without consideration of Army regulations.

CRITERIA: Contracts for installation pest control services must be reviewed and approved prior to advertisement for bid (AR 420-76, para 3-4k, 3-12c, 3-12d, 4-3a, and 4-3c).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Re-write Standard Operating Procedures for pest management contracts and services procured by credit card to include MACOM review and tenets put forth in Army Regulations and Department of Defense Instructions. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOC was not aware of the requirement for MACOM review of pest management contracts for services on post. This does not belong to DOC at Ft Bliss. Contracts for installation pest control services must be reviewed and approved prior to advertisement for bid. DOC has not issued any bids for Pest Control Services. The information was provided to the group from TRADOC, your finding description is wrong for DOC at Ft Bliss. The AAFES contracting activity is the Contracting Activity who procured by Credit Card and had asked for the persons identified so an audit can be completed. TRADOC sent a message to DOC requesting that next Credit Card Operating Procedures be updated to include policy on these changes. The Credit Card Administrator is aware of these changes and is

implementing them to include the next training session for Approved Officials and Credit Card users.

TRADOC COMMENT: The assessor does not concur with the installation comment. The finding should remain as is.

PM.15.1.A #1 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-15

MANUAL QUESTION NUMBER: PM-015-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ENTOMOLOGY EQUIPMENT YARD 9B

IFS FACILITY NUMBER: 60-76

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Entomology activity vehicles were not clearly labeled "Contaminated With Pesticides".

CRITERIA: Vehicles used for pesticide applications must be dedicated to pest control operations and meet specific design requirements (DODR 4145.19-1, para 3-415a(3) and AR 420-76, para 4-1d and 4-1e(1)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Procure removable signs for pest management vehicles. These should not be of the easily removable magnetic type but of the more difficult to remove vinyl type. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Signs are attached to truck windows. Corrective Action completed.

PM.40.1.A #1 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-10

MANUAL QUESTION NUMBER: PM-040-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: EL PASO FEDERAL CORRECTIONAL INST

IFS FACILITY NUMBER: 11631

FACILITY TYPE:

TENANT NAME: EL PASO FED CORRECTIONAL INST

FINDING DESCRIPTION: Pesticide usage not recorded in accordance with requirements of AR 420-76.

CRITERIA: Specific records are required to be kept as a part of the pest management process (DODI 4150.7, para E.3.h, para. E.3.v.(7), Enclosure 4, para 10; AR 420-76, para 4-4b, 44c(1) and 4-4c(3) through 4-4c(5)) [May 1997].

FINDING COMMENTS: This finding will disappear within the next twelve months as FCI is scheduled to close.

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Record all pesticide usage and forward to installation pest management coordinator on a monthly basis.

ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Corrective action completed. Prison staff are forwarding 1532 forms to the DPWL pest control supervisor.

PM.45.2 #1 III FEDERAL CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-07

MANUAL QUESTION NUMBER: PM-045-002

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: GOLF COURSE MIXING AND STORAGE FACILITY

IFS FACILITY NUMBER: 03007

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Plumbing for the golf course mixing and storage facility eye lavage and deluge shower was improperly installed rendering the safety equipment non-functional.

CRITERIA: Pesticide storage, mixing and preparation facilities must provide structures and procedures to ensure safety of personnel (29 CFR 1910.133 and 1910.134).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Have safety shower and eye lavage re-plumbed.

ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Other findings related to emergency showers are categorized Health/Safety rather than Class 1. DOE disagrees with the category of this finding. It should be a Health/Safety rather than a Class 1. The shower is under warranty and is being repaired by the contractor.

TRADOC COMMENT: Recommend changing the finding category to Health & Safety (H/S) category. Rationale: Criteria is 29 CFR and by definition should be a Health & Safety category.

USACHPPM COMMENT: The finding has been changed to a Health and Safety finding.



PM.45.2 #2 III FEDERAL CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-11

MANUAL QUESTION NUMBER: PM-045-002

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative EXISTING NOV: NO

LOCATION: EL PASO FEDERAL CORRECTIONAL FACILITY

IFS FACILITY NUMBER: 11631

FACILITY TYPE: HOUSING & COMMUNITY FACILITIES

TENANT NAME: EL PASO FED CORRECT FACILITY

FINDING DESCRIPTION: Professional use Dursban was stored in a plain metal cabinet in the supervisor's office at the Federal Correctional Institution.

CRITERIA: Pesticide storage, mixing and preparation facilities must provide structures and procedures to ensure safety of personnel (29 CFR 1910.133 and 1910.134).

FINDING COMMENTS: This finding will disappear within the next year when the El Paso Federal Corrections facility closes.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Store pesticides with an activity on post possessing an approved storage facility. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree. The prison is closing in 1998. Facility personnel do not intend to move the Dursban, which is not a "Restricted" pesticide but a "General Use" pesticide.

PM.45.2 #3 III FEDERAL CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-12

MANUAL QUESTION NUMBER: PM-045-002

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ENTOMOLOGY EQUIPMENT YARD

IFS FACILITY NUMBER: 060-76

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: The pesticide storage facility (TB 60-76, Yard 9B) was not deemed sufficient to protect public health and well-being. It does not meet the minimum standards in MIL-HDBK-1028/8A. It lacks adequate ventilation and climate control systems.

CRITERIA: Pesticide storage, mixing and preparation facilities must provide structures and procedures to ensure safety of personnel (29 CFR 1910.133 and 1910.134).

FINDING COMMENTS: Finding will be negated upon completion of new mixing and storage facility.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Continue work on new pesticide mixing and storage facility. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Complete new pesticide mixing/storage facility and move all pesticides/herbicides and associated equipment to a new facility.

PM.45.2 #4 III FEDERAL CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-13

MANUAL QUESTION NUMBER: PM-045-002

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ENTOMOLOGY EQUIPMENT YARD 9B

IFS FACILITY NUMBER: 60-36

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Two (2) five-gallon cans of malathion were stored in TB 60-36 in a manner inconsistent with personal safety requirements. Both cans of pesticide were open and in inadequate secondary containment. In addition, the building lacked climate control and adequate ventilation.

CRITERIA: Pesticide storage, mixing and preparation facilities must provide structures and procedures to ensure safety of personnel (29 CFR 1910.133 and 1910.134).

FINDING COMMENTS: This finding will disappear with completion of the new mixing and storage facility.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Continue work on the new pesticide mixing and storage facility. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: In progress.

PM.45.5.A #1 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-17

MANUAL QUESTION NUMBER: PM-045-005-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ENTOMOLOGY EQUIPMENT YARD 9B

IFS FACILITY NUMBER: 60-76

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Containers for spray tank waste on entomology vehicles were not clearly marked "Contaminated With Pesticides" and stored in a lockable compartment.

CRITERIA: Movable equipment used for handling pesticides must be labeled and handled according to specific requirements (AR 420-76, para 4-1b(3)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Containers for tank waste should be lockable and locked to the truck in addition to being marked "Contaminated With Pesticides". Estimated Cost: MINIMAL. ALTERNATIVE CORRECTIVE ACTION: Purchase additional locking compartments for Entomology Vehicles. ESTIMATED COST: \$5000.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 5000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Containers marked and locked.  
Corrective action completed.

PM.45.7.A #1 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-04

MANUAL QUESTION NUMBER: PM-045-007-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: GOLF COURSE MIXING AND STORAGE FACILITY

IFS FACILITY NUMBER: 03007

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: A five gallon container of 2,4-D Herbicide which had apparently not been used for some time was found to be leaking in the herbicide storage locker of the mixing and storage facility at the golf course.

CRITERIA: Pesticides in deteriorated or leaking containers will be recontainerized or overpacked in approved containers (AR 420-76, para 4-2c).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Overpack leaking container and dispose of through Defense Re-Utilization Marketing Office (DRMO). ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Corrective action completed.

PM.45.7.A #2 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-06

MANUAL QUESTION NUMBER: PM-045-007-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: GOLF COURSE MIXING AND STORAGE FACILITY

IFS FACILITY NUMBER: 03007

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Several containers of the insecticide Dursban which had expired in 1991 were found in the insecticide storage locker. The metal ends on the containers were rusting and deteriorating.

CRITERIA: Pesticides in deteriorated or leaking containers will be recontainerized or overpacked in approved containers (AR 420-76, para 4-2c).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: If the pesticide is not to be used in the next 3 months, arrange to turn in the pesticides to Defense Re-Utilization Marketing Office. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Corrective action completed.

PM.45.20.A #1 III ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-14

MANUAL QUESTION NUMBER: PM-045-020-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ENTOMOLOGY EQUIPMENT YARD 9B

IFS FACILITY NUMBER: 60-76

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: An outdoor mixing pad is not available for use in filling large volume pesticide application equipment. Both the Entomology Shop and Roads and Grounds Shop have items of equipment which require a facility of this type.

CRITERIA: Installations must include certain features in pest management facilities (DODI 4150.7, Enclosure 4, para 6.b and MIL-HDBK 1028-8A, para 3.1.3, 3.1.4.3, and 3.4.8) [May 1996].

FINDING COMMENTS: Completion of new facility will eliminate this finding.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Continue work on the new pesticide mixing and storage facility. ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: In progress.

PM.45.5.A #1 HS ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-16

MANUAL QUESTION NUMBER: PM-045-005-A

FINDING CATEGORY: HEALTH/SAFETY

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ENTOMOLOGY EQUIPMENT YARD 9B

IFS FACILITY NUMBER: 60-36

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Containers of water used for filling hand sprayers were transported in the beds of the entomology trucks. Original uses for these containers included used pesticide containers, water jugs, as well as a juice container and were unmarked. These containers should be of a standard type and clearly marked as "Non-Potable Water".

CRITERIA: Movable equipment used for handling pesticides must be labeled and handled according to specific requirements (AR 420-76, para 4-1b(3)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Procure standard containers for sprayer make-up water and clearly label them "Non-Potable Water". ESTIMATED COST: MINIMAL.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Container labeled "Non-Potable Water." Corrective action completed.



PM.2.1 #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-03  
MANUAL QUESTION NUMBER: PM-002-001  
FINDING CATEGORY: POSITIVE  
FINDING TYPE: Positive EXISTING NOV: NO  
LOCATION: OCCUPATIONAL HEALTH  
IFS FACILITY NUMBER: 02496  
FACILITY TYPE: HOSPITAL & MEDICAL FACILITIES

FINDING DESCRIPTION: Occupational Health Nurse has initiated program of quarterly Red Blood Cell (RBC) cholinesterase monitoring for pesticide applicators. The applicators also received annual physicals and were compliant about scheduling appointments. All applicators are within acceptable levels of RBC cholinesterase.

CRITERIA: Installations/CW facilities are required to comply with all applicable Federal regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).

FINDING COMMENTS:

STATUS OF CORRECTION:  
CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:  
COST: 0  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

PM.5.1.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Pesticide

FINDING ID: PM-MLB-02

MANUAL QUESTION NUMBER: PM-005-001-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION:

IFS FACILITY NUMBER: INST

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The installation Commanding General issued a policy memorandum dated 08 Dec 96 clarifying the responsibility for safe pesticide application and asserting the requirement that pesticide (and herbicide) applicators on Fort Bliss be duly certified.

CRITERIA: Installation pest management personnel are required to meet specific certification requirements (DODI 4150.7, para. E.3.v.(4) and Enclosure 4, para 5.b; AR 420-76, para 3-1) [May 1997].

FINDING COMMENTS: The Commanding General is to be congratulated for his proactive policy regarding his policy for safe chemical usage at Fort Bliss. The policy establishes Fort Bliss as a leader in implementing the policies of the Deputy Under Secretary of Defense for Environmental Security (DUSD/ES) with regard to installation pest management.

STATUS OF CORRECTION:

CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

## **PETROLEUM, OILS, AND LUBRICANTS (POL) MANAGEMENT**

The Fort Bliss petroleum, oil and lubricant (POL) management practices were good and have been effective in preventing spill incidents. Installation personnel had a good understanding of the requirements on POL handling, storage, spill prevention and spill response procedures. This is contributed to the ongoing training and awareness provided by the Directorate of Environment. There were no significant findings found during the assessment.

PO.20.2 #1 I FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-KP-06

MANUAL QUESTION NUMBER: PO-020-002

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL ROADS AND GROUNDS

IFS FACILITY NUMBER: 01073

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Three containment structures used for storage of POL products had open storm water drain valves.

CRITERIA: Drainage of rainwater from diked areas must be controlled by a valve which is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii)).

FINDING COMMENTS: Prior to draining accumulated rainwater, a visual inspection must be made to verify that no spilled product is within the containment area (e.g. no visible oil sheen). A log must be maintained which lists the date, volume of discharged storm water, a certification that no contamination was present and a signature of the responsible individual.

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Ensure valves on secondary containment structures remain closed at all times except to drain accumulated storm water. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Corrective action completed.

PO.65.6 #1 I FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-MB-01

MANUAL QUESTION NUMBER: PO-065-006

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: INST

IFS FACILITY NUMBER: INST

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Used oil containers at the following activities were improperly labeled: Directorate of Public Works and Logistics (DPWL) Heavy Equipment Maintenance Shop, Bldg# 2588; DPWL GSA Motorpool, Bldg# 1334; DPWL Locomotive Maintenance Shop, Bldg# 1378; GAFAD Motorpool, Bldg# 1076; 108th ADA HHB Motorpool, Bldg# 2423; TESCO Maintenance Shop, Bldg# 11304; Directorate of Community Activities (DCA) Auto Craft Shop, Bldg# 820; DPWL Roads and Grounds, Bldg# 1073; 35th ADA, 178th Motorpool, Bldg# 2643; 35th ADA, 2/1st BN Motorpool, Bldg# 2692; 11th ADA, 286 SIG BN Motorpool, Bldg# 2680; DPWL Power Plant, Bldg# 6152. This appears to be an installation-wide systemic problem.

CRITERIA: The label USED OIL must be clearly marked on containers used to store used oil and fill pipes used to transfer used oil into underground storage facilities (40 CFR 279.22 (c)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Relabel used oil containers and reemphasize labeling requirements at the next waste generator meeting.

Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: In addition to implementing the Corrective Action, DOE will check levels on used oil containers during quarterly hazardous waste inspections.

PO.20.1 #1 III FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-KP-01

MANUAL QUESTION NUMBER: PO-020-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL PAINT BOOTH

IFS FACILITY NUMBER: 02529

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Three 55-gallon drums of paint thinner were stored adjacent to the Directorate of Public Works and Logistics paint booth without adequate secondary containment.

CRITERIA: Appropriate containment and/or diversionary structures, and cleanup equipment to prevent discharged petroleum products from reaching navigable watercourse should be readily available at the installation/CW facility (40 CFR 112.7(c) and 112.7(d)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Provide appropriate secondary containment for this location. Use of a 4-drum, plastic containment pallet would be adequate. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE gave 5 spill-control pallets to DPWL to provide secondary containment for the drums of paint thinner. Corrective action completed.

PO.20.1 #2 III FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-KP-02

MANUAL QUESTION NUMBER: PO-020-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL COMBAT AND HEAVY EQUIPMENT MAINTENANCE

IFS FACILITY NUMBER: 02588

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Fourteen 55-gallon drums of solvent (PD 680-Type II) were stored behind Building 2588 without secondary containment.

CRITERIA: Appropriate containment and/or diversionary structures, and cleanup equipment to prevent discharged petroleum products from reaching navigable watercourse are should be readily available at the installation/CW facility (40 CFR 112.7(c) and 112.7(d)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Provide adequate secondary containment for this storage area and maintain on-site only those quantities necessary. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Drums were turned into DRMO. Corrective Action completed.

PO.20.1 #3 III FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-KP-03

MANUAL QUESTION NUMBER: PO-020-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL/GSA MOTORPOOL

IFS FACILITY NUMBER: 01334

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Two 500-gallon used oil tanks were in use and did not have adequate secondary containment.

CRITERIA: Appropriate containment and/or diversionary structures, and cleanup equipment to prevent discharged petroleum products from reaching navigable watercourse should be readily available at the installation/CW facility (40 CFR 112.7(c) and 112.7(d)).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Provide adequate secondary containment for the amount of used oil which will be regularly stored at this facility. Motorpool personnel reported that a replacement, double-walled "convault" tank had been programmed for this location, no additional cost should be necessary.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Oil tanks will be turned into DRMO. DOE submitted the 1348-1 documents to turn the oil pods into DRMO for disposal. The pods will be replaced by double-walled con vault tanks purchased under a 1998 Bold Grant.



PO.20.1 #4 III FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-KP-04

MANUAL QUESTION NUMBER: PO-020-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL LOCOMOTIVE MAINTENANCE FACILITY

IFS FACILITY NUMBER: 01378

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: A drum of used oil was stored outside of the locomotive maintenance facility without secondary containment.

CRITERIA: Appropriate containment and/or diversionary structures, and cleanup equipment to prevent discharged petroleum products from reaching navigable watercourse should be readily available at the installation/CW facility (40 CFR 112.7(c) and 112.7(d)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Provide a 4-drum, plastic containment pallet for this location. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Corrective Action completed.

PO.20.1 #5 III FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-KP-05

MANUAL QUESTION NUMBER: PO-020-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL ROADS AND GROUNDS MAINTENANCE

IFS FACILITY NUMBER: 01075

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: A 500-gallon used oil tank was located in the parking lot adjacent to the Roads and Grounds maintenance facility and did not have adequate secondary containment. Personnel at the site reported that this tank was no longer used, however, it was full at the time of the assessment.

CRITERIA: Appropriate containment and/or diversionary structures, and cleanup equipment to prevent discharged petroleum products from reaching navigable watercourse should be readily available at the installation/CW facility (40 CFR 112.7(c) and 112.7(d)).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Remove this tank if no longer needed or provide a suitable replacement equipped with secondary containment. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Tank removed and turned in to DRMO. Corrective Action completed.

PO.20.1 #6 III FEDERAL CORRECTIVE ACTION POL

FINDING ID: PO-KP-07

MANUAL QUESTION NUMBER: PO-020-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative EXISTING NOV: NO

LOCATION: LOCKHEED MARTIN MISSILE MAINTENANCE

IFS FACILITY NUMBER: 08691

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Three 55-gallon drums of lube oil were stored at the facility without secondary containment.

CRITERIA: Appropriate containment and/or diversionary structures, and cleanup equipment to prevent discharged petroleum products from reaching navigable watercourse should be readily available at the installation/CW facility (40 CFR 112.7(c) and 112.7(d)).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Provide a 4-drum plastic containment pallet for this location. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Purchase request submitted. Purchase a spill-control pallet for storing the lube oil. DOE initiated purchasing pallets to be issued on a charge-back basis to units for POL storage.

## **Solid Waste Management**

Storage, collection, transportation, and disposal of solid wastes are handled in an efficient, environmentally safe manner at Fort Bliss. Notable findings include exceedence of permitted elevations on final cover on a portion of the landfill, and an unpermitted dump area. Operations at the contractor-operated active landfill were in compliance with the permit and State-mandated requirements, with one exception. A minor deficiency noted was the lack of a sign at the entrance to the construction and demolition debris landfill.

Significant improvements could be made in the recycling program. A negative balance in the recycling budget clearing account indicates that an economic assessment of recycling operations is needed. Increased public promotion is crucial to the future success of this program.

SO.3.1.TX #1 I STATE CORRECTIVE ACTION      Solid Waste

FINDING ID: SO-DI-01

MANUAL QUESTION NUMBER: SO-003-001-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: 31ST ADA BDE/31ST CSH

IFS FACILITY NUMBER: 01056

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: UOFs were drained and flushed, then discarded into general trash.

CRITERIA: Persons who are involved in generating, storing, transporting, handling, and processing used oil filters (UOFs) and their components must comply with Texas Title 30, Chapter 330, Subchapter Z, 330.1180.

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Train personnel to drain UOFs for 24-hours before placing them in 55-gallon drums for turn-in to Defense and Reutilization Marketing Office (DRMO). Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENTS: The 31st CSH was notified about the correct procedure. Training for Fort Bliss personnel will be accomplished during monthly generators meeting and quarterly hazardous waste inspections.

SO.3.1.TX #2 I STATE CORRECTIVE ACTION      Solid Waste

FINDING ID: SO-DI-02

MANUAL QUESTION NUMBER: SO-003-001-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: 11TH ADA 286TH SIGNAL

IFS FACILITY NUMBER: 02680

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Used oil from UOFs was poured out, but the UOFs were not drained for 24-hours to ensure all free-flowing oil was removed from the UOFs as indicated in Texas Title 30, Chapter 339, Subchapter Z, 330.1186.

CRITERIA: A generator and a person owning or operating a UOF collection center shall ensure that all free-flowing oil, as defined in 330.1181 of Title 30, has been removed from UOFs stored on site (Texas Title 30, Chapter 330, Subchapter Z, 330.1186).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Train personnel to hot-drain the UOF for at least 24 hours. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The 11TH ADA was notified of the correct procedure. Ongoing training will be conducted as monthly generators meetings and during quarterly hazardous waste inspections.

SO.3.1.TX #3 I STATE CORRECTIVE ACTION      Solid Waste

FINDING ID: SO-MB-01

MANUAL QUESTION NUMBER: SO-003-001-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL, GSA MOTORPOOL

IFS FACILITY NUMBER: 01334

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Up to six drums of used oil filters were stored for over 90 days at the Directorate of Public Works and Logistics (DPWL) GSA Motorpool, Bldg# 1334. No secondary containment had been provided and the storage site was not registered with the Texas Natural Resource Commission (TNRC).

CRITERIA: Installations/CW facilities are required to comply with state and local solid waste regulations concerning solid waste management (EO 12088, Section 1-1). The following are requirements of the Texas Used Oil Filter (UOF) regulations: A UOF storage facility is a facility that stores more than three 55-gallon drums of UOF; the site must be registered with the TNRC; UOFs may not be stored for more than 90 days; UOFs must be stored in covered enclosures or in covered rainproof containers marked "Used Oil Filters"; the storage facility must be provided with secondary containment capable of containing an amount of oil equal to ten gallons for every 55 gallon drum (30 CTR 330.1180-1184).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Avoid the accumulation of more than three 55-gallon drums by arranging for more frequent contractor pick-ups (at least every 90 days). Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE gave GSA personnel a copy of the Texas regulations governing oil filters. GSA arranged for pick-up of the drums during the week of 15 Dec 1997. DOE will inspect the motor pool quarterly for compliance with Texas law regarding oil filters. Corrective Action completed.

SO.3.1.TX #4 I STATE CORRECTIVE ACTION      Solid Waste

FINDING ID: SO-MB-02

MANUAL QUESTION NUMBER: SO-003-001-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DCA, AUTO CRAFT SHOP

IFS FACILITY NUMBER: 00820

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Seven drums of used oil filters were stored outside for over 90 days at the Directorate of Community Activities (DCA) Auto Craft Shop, Bldg# 820. No secondary containment was provided and the storage site was not registered with the Texas Natural Resource Commission (TNRC). Many of the drums were not covered or labeled.

CRITERIA: Installations/CW facilities are required to comply with state and local solid waste regulations concerning solid waste management (EO 12088, Section 1-1). The following are requirements of the Texas Used Oil Filter (UOF) regulations: A UOF storage facility is a facility that stores more than three 55-gallon drums of UOF; the site must be registered with the TNRC; UOFs may not be stored for more than 90 days; UOFs must be stored in covered enclosures or in covered rainproof containers marked "Used Oil Filters"; the storage facility must be provided with secondary containment capable of containing an amount of oil equal to ten gallons for every 55 gallon drum (30 CTR 330.1180-1184).

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Avoid the accumulation of more than three 55-gallon drums by arranging for more frequent contractor pick-ups (at least every 90 days). Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DCA arranged for pick-up of the oil filters during the week of 15 Dec 1997. DOE will inspect the Auto Craft Shop quarterly to ensure compliance with Texas law. Corrective Action completed.



SO.10.2.TX #1 I STATE CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-04

MANUAL QUESTION NUMBER: SO-010-002-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: MULT

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: The majority of dumpsters used to store food wastes were missing drain plugs. Leakage from dumpsters may discharge to the surrounding area.

CRITERIA: Containers for the temporary storage of municipal solid waste must meet specific requirements. All solid wastes containing food wastes shall be stored in covered or closed containers which are leakproof, durable, and designed for safe handling (30 TAC, Section 330.23).

FINDING COMMENTS: Drain plugs were observed missing at the following locations: Buildings 1735, 1717, 2949, and 250.

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Contact El Paso Disposal and arrange to have drain plugs replaced after each dumpster is steam cleaned.

ESTIMATED COST: Minimal.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Corrective Action completed.

SO.35.20 #1 I FEDERAL CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-06

MANUAL QUESTION NUMBER: SO-035-020

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: LANDFILL

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Uncontrolled dumping of solid wastes was occurring in an area south of the Fort Bliss landfill. Although off-post residents may have been a source of some of the materials, the majority of the materials appear to consist of construction debris. Ammunition packing materials were also observed at the dump site.

CRITERIA: Open dumping is prohibited at the installation/CW facility (40 CFR 257.1(a)(2)) [March 1995]. The unloading of waste in unauthorized areas is prohibited (30 TAC 330.117).

FINDING COMMENTS: The following wastes were observed at the dump site: tires, furniture, mattresses, a lead-acid battery, drain culverts, concrete rubble, asphalt, wooden ammunition crates and other ammunition packing materials, wire, wooden pallets, and other scrap metal and wood.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Haul wastes to the landfill or recycling center as appropriate. Construct berms around the dump site and post signs to deter further use of the area as a waste disposal site. Attempt to identify the source of the wastes and reprimand the responsible parties. An aggressive campaign to deter illegal dumping could be included in efforts to promote the recycling program. ESTIMATED COST: \$400,000 to clean up wastes.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 400000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree, but the installation has no funded project to implement the Corrective Action. DOE cannot obtain funds through environmental channels. Fort Bliss Commanding General tasked Red Cycle Soldiers with cleaning up the dump site.

SO.75.1.TX #1 I STATE CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-01

MANUAL QUESTION NUMBER: SO-075-001-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: YES

LOCATION: DOE

IFS FACILITY NUMBER: LANDFILL

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Final cover on a portion of the Fort Bliss landfill exceeds elevations specified in the closure plans.

CRITERIA: Municipal Solid Waste Landfill units that stopped receiving wastes prior to 9 October 1993 must meet specific closure requirements (30 TAC, Sections 330.251 and 330.252(a) and (c)).

FINDING COMMENTS: In November of 1992, the Texas Natural Resources Conservation Commission issued Fort Bliss a Notice of Violation for exceeding permitted elevations in an area of the landfill that had received final cover. A final grading plan had been approved by TNRCC, but funds were not available to implement this plan.

STATUS OF CORRECTION:

CORRECTIVE ACTION: Continue to work with Directorate of Public Works and Logistics to identify a funding source to implement the final grading plan. ESTIMATED COST: \$1,132,000.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 1132000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS:

SO.140.1.TX #1 I STATE CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-07

MANUAL QUESTION NUMBER: SO-140-001-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: LANDFILL

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: No signs prohibiting dumping of putrescible wastes were observed at the construction and demolition landfill.

CRITERIA: Installations/CW facilities with Construction and Demolition disposal sites must meet specific requirements for the acceptance of waste. Type IV landfill operators and owners shall post large conspicuous warning signs at all entrances to the site stating that putrescible wastes are not accepted (30 TAC, Section 330.117(h)) [Revised June 1997].

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Post a conspicuous sign ("NO PUTRESCIBLE WASTES") at the entrance to the rubble pit. ESTIMATED COST: Minimal.

CORRECTIVE ACTION TYPE: EQUIPMENT PROCUREMENT OR CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION: Initiated/Contract modification in progress. DPWL is modifying the contract with the landfill operator to post a sign prohibiting dumping of putrescible wastes.

SO.1.2.A #1 III ARMY/DOD CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-08

MANUAL QUESTION NUMBER: SO-001-002-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: INST

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Very few activities were aware of the Fort Bliss policy for disposal of aerosol cans, which is to transport aerosol cans to the Defense Reutilization and Marketing Office where they could be safely punctured, then recycled as scrap metal.

CRITERIA: Management and organization of paperwork, materials, and personnel should be done in a manner that prevents noncompliance and recurrence of noncompliance, precludes/minimizes regulatory enforcement actions (including warning letters, etc.) promotes good public relations, and addresses systemic weaknesses in the overall operation of the program (MP). Installation personnel should be periodically informed about materials that are prohibited from disposal in solid waste receptacles (MP).

FINDING COMMENTS: Activities disposing of aerosol cans in dumpsters include 11th ADA 699th Maintenance (Building #1050) and 31st CSH 31st ADA (Building #1056).

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Include instructions for proper disposal of aerosol cans in educational materials distributed for promotion of the recycling program. Provide instruction for proper disposal of aerosol cans during quarterly Directorate of Environment hazardous waste inspections. ESTIMATED COST: Minimal (See finding SO-KB-05).

CORRECTIVE ACTION TYPE: TRAINING

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree. Instructions will also be included in the monthly hazardous waste generators meetings. Will present an instruction module on recycling at the February generators meetings. Recycling is already included in the hazardous waste inspections.

SO.1.3.A #1 III ARMY/DOD CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-02

MANUAL QUESTION NUMBER: SO-001-003-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: A written Integrated Solid Waste Management Plan (ISWMP) was not prepared, however, an ISWMP was being developed.

CRITERIA: Installations are required to establish local procedures and responsibilities for the execution of the waste management program and have an Integrated Solid Waste Management Plan (AR 200-1, para 52b and 5-10b(1)) [February 1997].

FINDING COMMENTS: The United States Army Environmental Hygiene Agency Technical Guide "Preparing an Integrated Solid Waste Management Plan, a Guide for Army Installations" may provide useful information for technical guidance of the draft ISWMP.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Prepare and implement an ISWMP. ESTIMATED COST: Minimal

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: In progress.

SO.2.1.A #1 III ARMY/DOD CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KM-01

MANUAL QUESTION NUMBER: SO-002-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: WBAMC/RADIOLOGY-ER

IFS FACILITY NUMBER: 07777

FACILITY TYPE: HOSPITAL & MEDICAL FACILITIES

TENANT NAME: WILLAIM BEAUMONT AMC

FINDING DESCRIPTION: Regulated Medical Waste (RMW) had been stored in a RMW bin located in a unsecured area (hallway) outside Radiology and Emergency Room. Non-hospital personnel had access to the hallway and to the contents of the RMW bin.

CRITERIA: Store RMW, excluding pathological waste, in the RMW storage area. This area will be secured, properly identified, and kept clean and free from pest. (HSC Reg 40-35)

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Secure the RMW bin(s) by moving them into a secured area or maintain the bins in their current location and secure the lid of the bin to prevent access by unauthorized persons. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENTS: Lids secured. Corrective action completed.

SO.10.1.A #1 III ARMY/DOD CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-03

MANUAL QUESTION NUMBER: SO-010-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: MULT

FACILITY TYPE: HOUSING & COMMUNITY FACILITIES

FINDING DESCRIPTION: Solid wastes had not been properly disposed. A wooden staircase and several articles of litter were observed surrounding the dumpster located behind the Auto Crafts Center (Building #820). Pallets, weathered cardboard, and additional litter were also observed near the salvage area. Litter was observed scattered around the dumpster at the Officer's Club (Building #250).

CRITERIA: Army installations are required to follow specific requirements for solid waste storage, collection, and cleaning of equipment (AR 420-47, para 3-4a) [February 1997].

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Clean up spilled litter and refuse around dumpsters and salvage area. Arrange for transportation of wooden stairs to the Fort Bliss sanitary landfill. ESTIMATED COST: Minimal.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Corrective Action completed.



SO.25.1.A #1 III ARMY/DOD CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-05

MANUAL QUESTION NUMBER: SO-025-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DCA / RECYCLING CENTER

IFS FACILITY NUMBER: INST

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: The recycling program was recycling 19.4% of all non-hazardous solid waste generated at Fort Bliss. This was below the State goal of 40%. Materials had not been recycled to the maximum extent possible for several reasons. Much of the solid waste stream consisted of cardboard, paper, and wood. Recycling did not have high visibility to military units or civilian personnel at Fort Bliss. Less than 1% of all recyclables were collected from military family housing.

CRITERIA: Army installations are encouraged to participate in any state or local recycling programs and to reduce the volume of solid waste materials at the source whenever practical (DOD 4165.60, para V(a), V(c), and V(h), and AR 200-1, para 5-10b(8)). It is the State's goal to achieve by January 1, 1994, the recycling of at least 40% of the State's municipal solid waste stream (30 TAC, Chapter 330, Section 330.1051).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: (1) Obtain command support for the recycling program in the form of additional command directives and clarification of roles and responsibilities to implement the program. (2) Develop a public awareness program to promote recycling. (3) Provide deskside containers and recycling dumpsters to large generators and arrange for scheduled pickups. (4) Post signs on all dumpsters listing recyclable materials and procedures for recycling. (4) Develop enforcement policies for failure to participate in the Fort Bliss mandatory recycling program. (5) It is recommended that the recycling committee meet with greater frequency. ESTIMATED COST:\$10,000 for public awareness program, \$110,000 for recycling containers and scheduled pickups, \$2,000 for signs.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 122000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENTS: Recycling containers. DOE submitted funding request for \$118,000 to TRADOC to buy recycling containers that will be placed throughout the installation.

SO.1.2.A #1 POSITIVE ARMY/DOD CORRECTIVE ACTION Solid Waste

FINDING ID: SO-KB-09

MANUAL QUESTION NUMBER: SO-001-002-A

FINDING CATEGORY: POSITIVE

FINDING TYPE: Positive

EXISTING NOV: NO

LOCATION: DOE SOLID WASTE MANAGEMENT PROGRAM

IFS FACILITY NUMBER: 00624

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Solid waste management is conducted in an enthusiastic and innovative manner that promotes cooperation and teamwork with various solid waste generators and handlers.

CRITERIA: Management and organization of paperwork, materials, and personnel should be done in a manner that prevents noncompliance and recurrence of noncompliance, precludes/minimizes regulatory enforcement actions (including warning letters, etc.) promotes good public relations, and addresses systemic weaknesses in the overall operation of the program (MP).

FINDING COMMENTS:

STATUS OF CORRECTION:

CORRECTIVE ACTION:

CORRECTIVE ACTION TYPE:

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Positive finding. No corrective action needed.

## **STORAGE TANK MANAGEMENT**

The most significant finding for this protocol pertained to the underground storage tank (UST) program. Tentative plans to replace, remove, or upgrade regulated USTs are scheduled to be completed during FY98. The contracts for the USTs need to be started so that Fort Bliss can meet the 22 December 1998 compliance deadline. In the State of Texas, USTs were subject to spill and overfill protection requirements by 22 December 1994. Deficiencies for USTs include corrosion protection, spill and overfill protection, and leak detection. Records should include but not limited to the following: registration, location, size, composition, contents, spill and overfill protection, corrosion protection, leak detection, testing and maintenance for all tanks on the installation. The lack of a well-documented tank management plan was the root cause for UST and above ground storage tank (AST) deficiencies. A tank management system consisting of consolidated records is necessary. A system to perform and document integrity testing of ASTs was not in place. An accurate inventory of all ASTs and USTs was not available, however the DOE staff was aware of all inventory discrepancies and was knowledgeable about the conditions of existing tanks.

ST.10.1 #1 I FEDERAL CORRECTIVE ACTION      Storage Tanks

FINDING ID: ST-SC-01

MANUAL QUESTION NUMBER: ST-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL POL TANK FARM

IFS FACILITY NUMBER: MULT

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: The bulk POL tank farm has one aboveground storage tank (AST) that is subject to reporting and recordkeeping requirements under 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquids) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984. The following have to comply with 40 CFR 60, Subpart kb: 25k AST, (MOGAS Tank No. 11019). Tank No. 11019 was installed in 1983, greater than 20k gallons, and stores gasoline at greater than 2 pounds per square inch (psi) that has a vapor pressure.

CRITERIA: Bulk gasoline terminals with greater than 75,700 L [19,997.82 gal] gasoline throughput per day that deliver liquid product into tank trucks and that started construction or modification after 17 December 1980 are required to meet specific operating standards (40 CFR 60 through 60.110b).

FINDING COMMENTS:

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: The best alternative for Fort Bliss is to seek an exemption under 40 CFR 60, Subpart Kb. The stringent recordkeeping, monitoring and reporting requirements are for storage vessels greater than 20,000 gallons (gal) and dispense more than 20,000 gal per day (bulk gasoline plants only). The daily throughput at the Fort Bliss tank farm for MOGAS (gasoline) tanks are well below 20,000 gal/day. Fort Bliss should seek a federally enforceable limit (< 20,000 gal/day) by submitting a Form PI-8 (formal exemption) with the Texas Natural Resource and Conservation Commission (TNRCC). The JP-8 stored has a very low true vapor pressure that is not in the specified vapor pressure range under 40 CFR 60, Subpart Kb, therefore the requirements will not apply to the JP-8 tanks over 20,000 gal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: This finding is not applicable to Bliss' bulk fuel farm and should be deleted. The text of the finding agrees with my opinion in the section labeled Suggested/Alternative Corrective Action. It states that the requirements "will not apply to the JP-8 tanks over 20k gallons." Three of the 4 tanks cited are JP-8 tanks over 20k gallons, so they are exempt. The tank cited is an unleaded gasoline AST for which the finding states that Bliss should seek an exemption. There is no need to seek an exemption because Bliss dispenses far less than the 20k gallons/day limit indicated in 40 CFR 60, Subpart Kb. Bliss typically dispenses about 75k gallons of gasoline/year (about 288 gallons/day).

TRADOC COMMENT: Recommend the finding be deleted. The criteria does not match the finding description.

USACHPPM COMMENT: Only tank (No. 11019, 25k gal., MOGAS) is subject to requirements of 40 CFR 60, Subpart Kb, the tank has to be limited by some enforceable regulatory requirement. Fort Bliss does not have any such regulatory limits on their MOGAS dispensing operations at the Tank Farm. To ensure formal/documented exemption and/or compliance with Subpart Kb, recommend that an enforceable limit be accepted for the MOGAS tank.

ST.60.1 #1 I FEDERAL CORRECTIVE ACTION      Storage Tanks

FINDING ID: ST-BN-06

MANUAL QUESTION NUMBER: ST-060-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL GSA MOTORPOOL

IFS FACILITY NUMBER: 01326

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: An underground storage tank located at building #1326 with double walls and interstitial monitoring for leak detection was inspected during the ECAS. The leak detection monitor alarm was sounding indicating that the monitor was not functioning properly or a leak may have occurred.

CRITERIA: Underground storage tanks are required to provide a method, or combination of methods of release detection (40 CFR 280.10(c), 280.10(d), and 280.40) [June 1997]. Owners must ensure that the release detection system is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition (40 CFR 280.40(a)(2)).

FINDING COMMENTS: The alarm on the monitor was sounding and the display indicated a leak alarm, annual test alarm, delivery needed, low product alarm, and a sudden loss alarm. This could be due to a malfunctioning monitor or an actual leak.

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Ensure release detection monitors are frequently inspected, train local employees on the operation of the monitors, and ensure notification requirements in case of alarm/malfunction are prominently posted. Estimated Cost: minimal. Repair/replace non-operable monitors. Estimated Cost: \$2,000/monitor to replace. Perform tightness testing of UST to ensure a leak has not occurred. Estimated Cost: \$1,000/test.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 3000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The monitor was repaired during the week of 15 December 1997. Corrective action completed.

TRADOC COMMENT: It is not clear why this is a finding. From the finding description, the tank had a leak detection system and there is no indication of poor maintenance, lack of calibration, lack of inspection of the monitor, or any other deficiency by the installation. A false alarm does not constitute non-compliance.

USACHPPM COMMENT: An alarm was sounding on the leak detection monitoring system. The individuals responsible for monitoring the tank was aware of the alarm, but failed to report it to the installation. The print-out from the monitoring system registered "leak occurred, loss detected". The alarm itself was sounding the "sudden loss" alarm. The actual cause of the alarm was unknown. Assuming that the worst of the two situations has occurred constitutes non-compliance (i.e. a leak was detected).



ST.90.2 #1 I FEDERAL CORRECTIVE ACTION      Storage Tanks

FINDING ID: ST-BN-05  
MANUAL QUESTION NUMBER: ST-090-002  
FINDING CATEGORY: CLASS I  
FINDING TYPE: Negative      EXISTING NOV: NO  
LOCATION: INSTALLATION-WIDE  
IFS FACILITY NUMBER: INST  
FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: Tank inventory list is inaccurate. Records of tank registrations, monthly inventory control and annual tightness testing, corrosion testing, repairs, closures, releases and site investigations were not all immediately available. Records were not organized to facilitate confirmation of the required data. Texas and New Mexico tank records were often not in agreement with installation records.

CRITERIA: Installations/CW facilities with USTs are required to meet specific recordkeeping requirements (40 CFR 280.10(c), 280.34(b), 280.34(c), 280.45, and 280.74) [March 1995].

FINDING COMMENTS: The installation knows of the inadequate recordkeeping. A contractor was used to confirm the installations tank inventory. This inventory needs to be reviewed and given to the state.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED  
CORRECTIVE ACTION: Update the tank inventory. Develop a centralized recordkeeping system for all tank information. Register tanks if required, and obtain copies of all missing tank documents from the state. Meet with State Regulators to reconcile tank records. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE  
COST: 0  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Tankman system (database) is almost ready for use at Fort Bliss. DOE files are being organized. Monthly inventory control records are supplied by individual tank users and with frequent turnover of military personnel, it is very difficult to implement training for unit POC's and to maintain complete records for monthly inventories.

## Storage Tanks

FINDING ID: ST-BN-01

MANUAL QUESTION NUMBER: ST-025-001

FINDING CATEGORY: CLASS II

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: INSTALLATION-WIDE

IFS FACILITY NUMBER: INST

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: The installation has approximately 136 Underground Storage Tanks (USTs). Of these, 23 USTs do not meet the new UST system requirements or the upgrade requirements. Upgrading includes the lining and/or cathodic protection of steel tanks, the cathodic protection of underground piping which routinely contains material, and the provision of spill and overfill prevention equipment. The installation has developed a plan for the replacement and upgrading of USTs located at buildings: #11339, #2624, #1318, #2986, #11185, #3672, #2588, #2626, #2631, #2632, #2629, #8659, #9481, #9482, #1045, and #9484.

CRITERIA: Substandard UST systems are required to be upgraded, closed, or removed from service by 22 December 1998 (40 CFR 280.10(c) and 280.21(a) through 280.21(c)).

FINDING COMMENTS: Fort Bliss has a contract with Laguna Construction Company for \$1,397,000. The contract includes upgrading, removal, and replacement of the 23 substandard USTs.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Options: 1) Close and remove all substandard USTs before 22 December 1998. Estimated Cost: \$50,000/tank (includes initial sampling but not remediation). Replace with USTs meeting new requirements (Estimated Cost: \$40,000/20,000 gal tank), or replace with above ground tanks (Estimated Cost: \$40,000/20,000 gal tank). 2) Upgrade tanks to comply with standards before 22 December 1998. Estimated cost/20,000 gal tank: \$10,000 internal lining; \$9,000 cathodic protection; \$1,000 spill and overflow/overfill protection.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 100000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Remove steel tanks. Upgrade fiberglass tanks. Phase 4 removal/upgrade is in progress.

ST.5.1 #1 III FEDERAL CORRECTIVE ACTION      Storage Tanks

FINDING ID: ST-BN-02

MANUAL QUESTION NUMBER: ST-005-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: 11TH ADA

IFS FACILITY NUMBER: 02464

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Secondary containment was not provided for 12 tank trucks containing fuel at building #2464 (11th ADA). Trucks are parked upgrade from a storm drain. Any spill or leak could potentially reach the storm drain. No visual evidence indicated that a leak or spill had occurred.

CRITERIA: All bulk storage tanks (over 660 gal [ 2498 L]) should be provided with a secondary means of containment for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation (40 CFR 112.1(d), 112.7(d), and 112.7(e)(2)(ii)). Mobile or portable oil storage tanks should be positioned so as to prevent spilled oil from reaching navigable waters and a secondary means of containment should be furnished (40 CFR 112.7(e)(2)(xi)).

FINDING COMMENTS:

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Provide secondary containment - Options: 1) Relocate tank trucks to an adequate contained area. Estimated Cost: minimal. 2) Construct impervious containment that will hold the contents of the largest tank, with sufficient freeboard to accommodate precipitation (generally 10% of volume). Estimated Cost: \$20/ft of 6-in concrete berming; \$2/sq ft installed liner for existing berm; \$0.50/sq ft sand bag berm with plastic tarp liner.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST:

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: An A106 funding request will be submitted in the spring of 1998. Construct impervious containment.

TRADOC COMMENT: Recommend the finding category be changed to a Class 1. Rationale: Release from tank trucks would reach the

storm drain and navigable waters. Recommend adding a third alternative: "Obtain spill protection materials for use during fueling operations to prevent any POL products from reaching the storm drain.

USACHPPM COMMENT: The assessor will change finding classification. The installation was required to provide one of two things: secondary containment for mobile tankers or address spill control and cleanup procedures in the Spill Prevention, Control, and Countermeasures Plan. Both of these are not maintained.

ST.5.1 #2 III FEDERAL CORRECTIVE ACTION      Storage Tanks

FINDING ID: ST-BN-04

MANUAL QUESTION NUMBER: ST-005-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: BIGGS BULK POL

IFS FACILITY NUMBER: 11024

FACILITY TYPE: SUPPLY & STORAGE FACILITIES, LOGISTICS

FINDING DESCRIPTION: Bulk fuel storage tank #11024 was located in an unlined bermed area. Should a spill occur, this containment area would prove to be inadequate as fuel would seep into the ground. Storage tanks #11022 and #11025 also do not have liners; however, these tanks are currently not in use. No visual evidence indicated that a leak or spill had occurred.

CRITERIA: All bulk storage tanks (over 660 gal [ 2498 L]) should provide a secondary means of containment for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation (40 CFR 112.1(d), 112.7(d), and 112.7(e)(2)(ii)).

FINDING COMMENTS: The installation is aware of the problem and is waiting for adequate funding to provide a liner for the containment area.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Provide a means of secondary containment; construct impervious containment that will hold the contents of the largest tank, with sufficient freeboard to accommodate precipitation (generally 10% of volume). Estimated Cost: \$2/sq ft installed liner for existing berm.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST:

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DPWL has requested funds (1391 process) from DLA that may be used to correct this finding. DPWL is checking the 1391 to determine if funding can be obtained to construct secondary containment.

ST.5.1 #3 III FEDERAL CORRECTIVE ACTION      Storage Tanks

FINDING ID: ST-BN-03

MANUAL QUESTION NUMBER: ST-005-001

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: 108TH ADA 2/43 BN

IFS FACILITY NUMBER: 02942

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Secondary containment was not provided for 13 fuel tank trucks containing fuel at building #2942 (108th ADA). Trucks are parked upgrade from a storm drain. Any spill or leak could potentially reach the storm drain. No visual evidence indicated that a leak or spill had occurred.

CRITERIA: All bulk storage tanks (over 660 gal [ 2498 L]) should be provided with a secondary means of containment for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation (40 CFR 112.1(d), 112.7(d), and 112.7(e)(2)(ii)). Mobile or portable oil storage tanks should be positioned so as to prevent spilled oil from reaching navigable waters and a secondary means of containment should be furnished (40 CFR 112.7(e)(2)(xi)).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Provide secondary containment - Options: 1) Relocate tank trucks to an adequate contained area. Estimated Cost: minimal. 2) Construct impervious containment that will hold the contents of the largest tank, with sufficient freeboard to accommodate precipitation (generally 10% of volume). Estimated Cost: \$20/ft of 6-in concrete berming; \$2/sq ft installed liner for existing berm; \$0.50/sq ft sand bag berm with plastic tarp liner.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 22

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: An A 106 funding request will be submitted in the spring of 1998. Construct impervious containment.

## **Polychlorinated Biphenyls**

There were no findings associated with this media.

## **ASBESTOS PROGRAM MANAGEMENT**

The Fort Bliss Asbestos Management Program (AMP) is being managed well. However, due to lack of funding, the AMP is not in compliance with AR 200-1. There were two Class III repeat findings with this program. Fort Bliss had not completed a base-wide asbestos building survey that meets the requirement of AR 200-1 and did not have an Asbestos Management Plan that describes the current Operation and Maintenance (O&M) procedures used at Fort Bliss to manage asbestos as required by AR 200-1.



T2.1.3.A #1 III ARMY/DOD CORRECTIVE ACTION Asbestos

FINDING ID: T2-JH-01

MANUAL QUESTION NUMBER: T2-001-003-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00515

FACILITY TYPE: REAL ESTATE, SITE IMPROVEMENTS

FINDING DESCRIPTION: Fort Bliss had not completed a base-wide asbestos building survey, that meets the requirements of AR 200-1.

CRITERIA: Installations are required to conduct an asbestos survey of all structures and program and budget resources to identify, manage, and control exposure to asbestos. Periodic surveys are required to be conducted to identify the existence, extent, and condition of all asbestos. As a priority, asbestos surveys are required to be conducted in all housing units and in those buildings which will be renovated, demolished, or transferred from Army use (AR 200-1, Chapter 8, 21 February 1997). Management of paperwork, materials and personnel should be done in a manner that precludes Notices of Violation (NOVs) and addresses systemic weakness in the overall operation of the program.

FINDING COMMENTS: This repeat finding also affects Fort Bliss's Asbestos Management Plan. Without an accurate survey of Fort Bliss's structures, the installation cannot effectively prepare/implement a Special Operations and Maintenance Plan and Asbestos Abatement Plan for the various structures containing asbestos. One office, such as the DOE should be responsible for receiving all documents for asbestos related projects. In conjunction with an Operation and Maintenance (O&M) Plan, this would allow for better tracking of what materials have been removed, and what materials remain.

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Perform an asbestos building survey that meets the requirements of AR 200-1, Chapter 8. The building survey must identify the location, extent, and condition of all friable and non-friable asbestos. Perform periodic follow-up inspections of buildings per AR 200-1. Estimated Cost: \$2,000,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 2000000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree, but the project has never been funded. DOE does not receive funding through environmental channels to complete an asbestos survey.

T2.1.4.A #1 III ARMY/DOD CORRECTIVE ACTION Asbestos

FINDING ID: T2-JH-02

MANUAL QUESTION NUMBER: T2-001-004-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00515

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Fort Bliss did not have an Asbestos Management Plan that describes the current Operation and Maintenance (O&M) procedures used at Fort Bliss to manage asbestos, as required by AR 200-1. It is important for asbestos risk management that the installation know the condition, location, and extent of asbestos in all Department of the Army controlled structures managed by Fort Bliss. Additionally, buildings must be resurveyed periodically to record changes in the condition of the asbestos.

CRITERIA: Installations are required to prepare, coordinate, and execute an Installation Asbestos Management Plan (AR 200-1, para 8-2h, 8-3) [21 February 1997].

FINDING COMMENTS:

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Prepare and execute an Asbestos Management Plan that describes the operation and maintenance procedures that are used at Fort Bliss as required by AR 200-1, Chapter 8. One office should be responsible for receiving all documents for asbestos related projects. In conjunction with an Operation and Maintenance (O&M) Plan, this would allow for better tracking of what materials have been removed, and what materials remain.

Estimated Cost: \$250,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 250000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Agree, but the project has never been funded. Management plan exists for specific types of materials. DOE does not receive funding through environmental channels to prepare and execute an Asbestos Management Plan. DPWL has never been funded to develop the plan. DOE does receive documents to review for asbestos-related

projects. This review is part of the Installation NEPA compliance.

TRADOC COMMENT: The cost estimate appears to be high for the preparation of a plan. What is the basis of this estimate? Does the asbestos management plan prepared as part of the Fort Bliss agreement to reduce NOVs suffice? Recommend the assessor review and modify this section as appropriate.

## **Radon**

There were no findings associated with this media.

## **LEAD PROGRAM MANAGEMENT**

The Fort Bliss Lead Management Program is being managed well. However, there was one Class III repeat finding. The Directorate of Environment (DOE) did not have a complete written Lead-Based Paint (LBP) Management Program Document, which could locate, evaluate, and manage hazards caused by LBP. The current program document is in draft form and needs to be finalized.

T4.1.3.A #1 III ARMY/DOD CORRECTIVE ACTION Lead Based Paint

FINDING ID: T4-JH-01

MANUAL QUESTION NUMBER: T4-001-003-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00515

FACILITY TYPE: REAL ESTATE, SITE IMPROVEMENTS

FINDING DESCRIPTION: The Directorate of Environmental (DOE) did not have a complete written Lead-Based Paint (LBP) Management Program Document which could locate, evaluate, and manage hazards caused by LBP. The current program document is in draft form, and still needs to be finalized.

CRITERIA: Installations should have an LBP management program to identify, assess, manage in-place, remove and dispose of LBP (AR 200-1, Chapter 4-6, 21 February 1997 and DOD LBP Policy Guidance Letter, dated 28 April 1993).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Complete the LBP Management Program Document. Ensure that the document includes procedures for conducting demolition, abatement, renovation, and maintenance work. Also, include procedures for both worker protection and waste characterization of LBP construction debris/waste. Estimated Cost: Minimal.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: In progress.

TRADOC COMMENT: Recommend DOE coordinate with DPW-L concerning the engineering portions of the lead-based paint program.

## **Wastewater Management**

In general, the Fort Bliss wastewater management program met most regulatory requirements. However, there were several areas in need of improvement. There were a few locations found where wastewater was discharged into storm sewers. Several problems were also found at the range sewage lagoons and included: inadequate bar screen maintenance and an overflowing influent channel. Furthermore, there was still a discrepancy about the plans and permits required for the compliant operation of the lagoons. The installation had recently transferred storm water permit coverage from the baseline general permit to the multi-sector general permit (MSGP). However, all compliance requirements of the MSGP had not yet been completed. A final area of concern was compliance with El Paso pretreatment regulations. Clarification of requirements and an expansion of existing sampling programs may be required to ensure compliance with local discharge limits.



WA.3.1 #1 I LOCAL CORRECTIVE ACTION

Wastewater

FINDING ID: WA-KP-01

MANUAL QUESTION NUMBER: WA-003-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL AVIATION MAINTENANCE FACILITY

IFS FACILITY NUMBER: 11108

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: The aviation maintenance facility at Building 11108 was using a photo-processing machine, which was directly connected to the sanitary sewer system. Although the unit was equipped for silver recovery, it is likely that some amount remains in its effluent. El Paso Public Service Board pretreatment requirements prohibit the discharge of silver compounds into the city collection system.

CRITERIA: Installations/CW facilities are required to comply with state and local wastewater regulations (EO 12088, Section 1-1). The El Paso Water Utilities Rules and Regulations No. 9 prohibit the discharge of mercury and silver compounds into the city collection system.

FINDING COMMENTS: See related finding (WA-KP-12) in regard to pretreatment program compliance requirements.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Collect and analyze a sample from the installation's connection to the city wastewater collection system to determine compliance with El Paso pretreatment requirements. Estimated Cost: minimal. This determination will require notification from the city as to what constitutes an acceptable concentration (e.g. what level is equivalent to "no silver compounds").

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Samples collected during the week of 26 Jan 98. Analytical results expected in early February. DOE will complete corrective action with the El Paso Water Utilities.

WA.3.1 #2 I LOCAL CORRECTIVE ACTION

Wastewater

FINDING ID: WA-KP-12

MANUAL QUESTION NUMBER: WA-003-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL DOE

IFS FACILITY NUMBER: INST

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: Industrial users of the El Paso wastewater collection system must meet certain requirements. In addition, no mercury or silver compounds may be discharged. Testing at William Beaumont Army Medical Center (WBAMC) facilities has indicated that silver and mercury compounds may be entering the collection system. There are other sources (photo developers) in the Fort Bliss cantonment area which have the potential to discharge these compounds.

CRITERIA: Installations/CW facilities are required to comply with state and local wastewater regulations (EO 12088, Section 1-1). The rules and regulations of the El Paso Public Service Board (Rules and Regulations No. 9) require industrial users to meet certain requirements.

FINDING COMMENTS: A decision will be required on the analytical reporting levels that constitute no discharge of "mercury or silver compounds." A request should be made that results below detection limits (using approved 40 CFR 136 techniques) can be reported as zero. If fence line testing indicates unacceptable pollutant levels, additional pretreatment may be necessary.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Contact the El Paso Public Service Board to determine if the Fort Bliss cantonment area qualifies as an "industrial user" or "significant industrial user." If so designated, baseline and routine monitoring may be required at the connection(s) to the city collection system (Estimated Cost: minimal). Refine the current testing program at the WBAMC facilities to include sample locations at the connection(s) to the city collection system. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: In progress.

WA.3.1.NM #1 I STATE CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-07

MANUAL QUESTION NUMBER: WA-003-001-NM

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: SEWAGE LAGOONS (RANGES AND MYER CAMP)

IFS FACILITY NUMBER: LAGOONS

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Wastewater generated at the three ranges (McGregor, Dona Ana and Oro Grande) and Myer Camp was discharged to lagoons/evaporation ponds. Although a remote possibility, wastewater in these unlined lagoons may have reached groundwater. Discharges to New Mexico groundwater are allowed only after developing a discharge to groundwater plan and obtaining state approval.

CRITERIA: New Mexico Water Quality Control Commission regulations, Part 3, Section 3-100, require facilities which discharge to ground water to submit a plan for the Director's approval.

FINDING COMMENTS: Directorate of Environment personnel are in the process of developing the necessary discharge to ground water plans.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Develop and submit for state approval the required discharge to groundwater plan. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OTHERS

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION: Latest drilling investigation results: Don Ana pond-depth to groundwater (GW) = 320 ft; McGregor pond-drilled to 350 ft with no GW under lagoon to that depth; Oro Grande pond-bedrock encountered at 320 ft with no GW under lagoon.

USACHPPM COMMENT: Discharge to GW Plans: There does not appear to be a "reasonable potential" to reach groundwater. The criteria is the basis for the inclusion/exclusion of pollutants on a NPDES permit. It seems reasonable that the same logic applies in this situation. Without a connection between the lagoons and GW, a discharge to GW plan is technically unnecessary. A non-

confrontational letter for the NM regulators should be drafted for the Garrison Commander's (GC) signature which describes this position and includes the drilling logs as supporting documentation. This will eliminate the GW concerns for these lagoons. They may be regulated under a non-water statute, depending on the types of non-human wastes (RCRA) if any, they have received.

Surface Water Discharge: Since the McGregor Range lagoon has an overland discharge, and will continue to have one for the foreseeable future, it likely requires a NPDES permit. The wetland created could now be considered a United States surface water requiring permits for discharges into it. The well data does not affect this requirement or the related ECAS finding. Fort Bliss should obtain EPA-Region VI clarification on the NPDES permit requirements for the McGregor lagoon.

WA.10.1 #1 I FEDERAL CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-02  
MANUAL QUESTION NUMBER: WA-010-001  
FINDING CATEGORY: CLASS I  
FINDING TYPE: Negative      EXISTING NOV: NO  
LOCATION: DPWL AVIATION MAINTENANCE  
IFS FACILITY NUMBER: 11108  
FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Helicopter engines are cleaned with jet path cleaner and flushed with water on the tarmac in front of the hangar. The discharge from this process could enter a nearby storm drain.

CRITERIA: Installations/CW facilities with point source discharges are required to have either a State NPDES or a Federal NPDES permit if located in states without an USEPA approved NPDES permit program (40 CFR 122.1(b)(3)) [May 1996].

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED  
CORRECTIVE ACTION: Ensure the jet path cleaning operation is conducted in an area of the facility where there is no possibility for the discharge to enter storm drains. Estimated Cost: minimal. The reportedly small volume of process effluent (5-10 gallons) should easily evaporate prior to discharge if the cleaning is conducted away from any storm drains.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE  
COST: 0  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DPWL personnel are developing an SOP for cleaning engines at the Aviation Maintenance facility. The SOP will prohibit cleaning operations in the vicinity of storm drains.

WA.10.1 #2 I FEDERAL CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-03

MANUAL QUESTION NUMBER: WA-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: 2/43 108TH ADA

IFS FACILITY NUMBER: 02423

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: Personnel were cleaning a portable, diesel powered, electric generator with a steam cleaner on the gravel parking lot in front of the building.

CRITERIA: Installations/CW facilities with point source discharges are required to have either a State National Pollutant Discharge Elimination System (NPDES) or a Federal NPDES permit if located in states without an USEPA approved NPDES permit program (40 CFR 122.1(b)(3)) [May 1996].

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Ensure all steam cleaning operations are conducted at a washrack which is connected to the sanitary sewer and equipped with an oil/water separator. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE  
COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Corrective action completed.

WA.10.1 #3 I FEDERAL CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-04

MANUAL QUESTION NUMBER: WA-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: RAYTHEON MAINTENANCE FACILITY

IFS FACILITY NUMBER: 11005

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Various types of vehicles and equipment were steam cleaned in an area outside the hangar. The discharge from this process was directed to an adjacent storm sewer.

CRITERIA: Installations/CW facilities with point source discharges are required to have either a State NPDES or a Federal NPDES permit if located in states without an USEPA approved NPDES permit program (40 CFR 122.1(b)(3)) [May 1996].

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: (1) Ensure this cleaning operation takes place at an existing wash rack area. Estimated Cost: minimal.

(2) Construct an appropriate wash rack at this location that is equipped with an oil/water separator and connected to the sanitary sewer. Estimated Cost: \$15,000. In either case, soap or solvents should not be allowed.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 15000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Cleaning operation will be performed at existing wash rack. Corrective action completed.

WA.10.1 #4 I FEDERAL CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-05

MANUAL QUESTION NUMBER: WA-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: C CO. 204TH MI BN

IFS FACILITY NUMBER: 11108

FACILITY TYPE: MAINTENANCE FACILITIES

FINDING DESCRIPTION: Fixed wing aircraft and engines were steam cleaned inside the hangar and the discharge entered a drain which appeared to be a storm sewer connection.

CRITERIA: Installations/CW facilities with point source discharges are required to have either a State NPDES or a Federal NPDES permit if located in states without an USEPA approved NPDES permit program (40 CFR 122.1(b)(3)) [May 1996].

FINDING COMMENTS: A wash rack facility constructed at this location could also be used for jet engine cleaning which takes place in front of this hangar (see finding WA-KP-02).

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Construct a wash rack for this facility which is equipped with a properly sized oil/water separator and connected to the sanitary sewer. Estimated Cost: \$15,000.

CORRECTIVE ACTION TYPE: CORRECTIVE PROJECT

COST: 15000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: DPWL has funding to upgrade aircraft cleaning facilities and DOE is working with Public Works to build a wash rack at Bldg# 11108. In the meantime, vehicle cleaning near the drain has been suspended.



WA.10.1 #5 I FEDERAL CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-06  
MANUAL QUESTION NUMBER: WA-010-001  
FINDING CATEGORY: CLASS I  
FINDING TYPE: Negative      EXISTING NOV: NO  
LOCATION: AUTO CRAFT SHOP  
IFS FACILITY NUMBER: 00820  
FACILITY TYPE: HOUSING & COMMUNITY FACILITIES

FINDING DESCRIPTION: An oil/water separator at the auto craft shop connected to the reportedly closed washracks had overflowed. A considerable amount of oily wastewater discharged across the parking lot and into an adjacent drainage ditch. It was reported that a nearby sanitary sewer manhole was opened during the overflow and some of the wastewater was directed into it.

CRITERIA: Installations/CW facilities with point source discharges are required to have either a State NPDES or a Federal NPDES permit if located in states without an USEPA approved NPDES permit program (40 CFR 122.1(b)(3)) [May 1996].

FINDING COMMENTS: The floor drains inside the auto craft shop are connected to the oil/water separator. These floor drains should be the only source of oily wastewater if the wash racks are indeed closed. Limiting wet cleaning of the shop floors should reduce the load on the separator.

STATUS OF CORRECTION: COMPLETE  
CORRECTIVE ACTION: Provide for the routine inspection, maintenance and cleaning of the facilities oil/water separator.  
Estimated Cost: \$6,000.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE  
COST: 6000  
1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: Craft Shop personnel cleaned out the separator. DOE inspectors will check the OWS quarterly during hazardous waste inspections to ensure regular maintenance.

WA.10.1 #6 I FEDERAL CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-08

MANUAL QUESTION NUMBER: WA-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: MCGREGOR RANGE BASE CAMP

IFS FACILITY NUMBER: LAGOON

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The amount of wastewater generated at the McGregor range base camp exceeds the design capacity of the wastewater lagoon and causes it to continuously discharge. It is possible that the effluent stream or the area it travels through could be considered a water body requiring NPDES permits for discharges into it.

CRITERIA: Installations/CW facilities with point source discharges are required to have either a State NPDES or a Federal NPDES permit if located in states without an USEPA approved NPDES permit program (40 CFR 122.1(b)(3)) [May 1996].

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Obtain clarification from EPA Region VI on the applicability of NPDES requirements for the McGregor Range sewage lagoon. Apply lagoon in series for NPDES permit coverage if necessary and prepare for any required routine monitoring.  
Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE will work with the EPA to determine and implement NPDES requirements.

WA.10.1 #7 I FEDERAL CORRECTIVE ACTION      Wastewater

FINDING ID: WA-KP-10

MANUAL QUESTION NUMBER: WA-010-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: ORO GRANDE RANGE

IFS FACILITY NUMBER: LAGOON

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The influent pipe to the Oro Grande lagoon was clogged and raw wastewater was discharging to the ground and into an intermittent stream.

CRITERIA: Installations/CW facilities with point source discharges are required to have either a State NPDES or a Federal NPDES permit if located in states without an USEPA approved NPDES permit program (40 CFR 122.1(b)(3)) [May 1996].

FINDING COMMENTS:

STATUS OF CORRECTION: COMPLETE

CORRECTIVE ACTION: Provide for the routine maintenance of the lagoon grit chamber and jet rod the influent pipe. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: The pipe was cleared but should be upgraded. At this time, there is no funding to replace the influent pipe. Corrective action corrected at present.

WA.10.3 #1 II FEDERAL CORRECTIVE ACTION Wastewater

FINDING ID: WA-KP-11

MANUAL QUESTION NUMBER: WA-010-003

FINDING CATEGORY: CLASS II

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL DOE

IFS FACILITY NUMBER: 00624

FACILITY TYPE: ADMINISTRATIVE, COMMUNICATION FACILITIES

FINDING DESCRIPTION: The installation has recently transferred NPDES storm water permit coverage from the expired baseline general permit to the existing multi-sector general permit (MSGP). Coverage under the MSGP will require several modifications to the storm water program.

CRITERIA: Installations/CW facilities which are dischargers of stormwater associated with an industrial activity (see definitions) are required to apply for an individual permit, apply for a permit through a group application, or seek coverage under a promulgated stormwater general permit (40 CFR 122.26(c) and 122.26(g)) [May 1996].

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Coverage under the MSGP requires the following: 1. Modification and upgrade of the Storm Water Pollution Prevention Plan by February 17, 1998 (Estimated Cost: \$20,000) 2. Quarterly storm water sampling for FY 1998 (Estimated Cost: \$10,000). 3. Quarterly visual inspections (Estimated Cost: minimal). 4. Implementation of construction best management practices (BMPs) by 29 September 1998 (Estimated Cost: unknown, dependent on number and extent of required BMPs).

CORRECTIVE ACTION TYPE: OTHERS

COST: 30000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: Storm Water Pollution Prevention Plan will be completed in February 1998. Implementation Guide for BMP's will be finished in March and implementation of construction BMP's will follow in June 1998.

WA.21.2.NM #1 III STATE CORRECTIVE ACTION Wastewater

FINDING ID: WA-KP-09

MANUAL QUESTION NUMBER: WA-021-002-NM

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: MCGREGOR RANGE BASE CAMP

IFS FACILITY NUMBER: LAGOON

FACILITY TYPE: TRAINING BLDGS, RANGES, COURSES, TROOP OPNS

FINDING DESCRIPTION: The bar screen located in the influent channel to the sewage lagoon was not properly maintained. Trash and debris removed from the influent was covering the bar screen and the surrounding area.

CRITERIA: Maintenance of public wastewater systems at Installations/CW facilities must meet specific requirements (20 NMAC 7.4, 200 (d)).

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Provide for the routine maintenance of the bar screen at the sewage lagoon. Estimated Cost: minimal.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE is developing an SOP for implementation by DPWL range camps personnel.

## WATER QUALITY MANAGEMENT

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Fort Bliss operates a public drinking water system in three areas in Texas: Fort Bliss Main Post, the Site Monitor, and Biggs Army Airfield; and one area in New Mexico: Dona Ana Range Camp. Fort Bliss also provides support to the McGregor Range Camp in New Mexico which purchases their water from the City of El Paso, classified as a consecutive water system, and the Oro Grande Range Camp in New Mexico which receives their water from White Sands Missile Range. All systems use groundwater as their source and add chlorine for treatment. Each system must conduct its own regulatory drinking water monitoring.

Five Class I Findings were written. The Class I findings dealt with no operation permit for three water systems in New Mexico, lack of a cross-connection control program, repairing the reservoir (NOV), inspecting storage tanks, and maintaining records. There was a total of two Class III findings: no written emergency/contingency plan and distribution system flushing plan.

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The Preventive Medicine Service (PVNTMED Svc) at William Beaumont Army Medical Center (WBAMC) currently performs the bacteriological monitoring and record keeping requirements for the installation and range camps. The PVNTMED Svc man-power, will be downsized in February 1998. With this shortage of man-power, there is a potential that PVNTMED Svc can not perform the bacteriological monitoring/sampling requirements for the installation. Since the Directorate of Environment (DOE) has the overall responsibility to meet the Texas Natural Resource Conservation Commission (TNRCC) monitoring requirements, they should start investigating other alternatives to comply with the bacteriological sampling. The DOE, Directorate of Public Works and Logistics (DPWL) and PVNTMED Svc should get together to resolve this issue.

WQ.3.1 #1 I STATE CORRECTIVE ACTION

Water Quality

FINDING ID: WQ-KS-02

MANUAL QUESTION NUMBER: WQ-003-001

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: MULT

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Dona Ana, McGregor, and Oro Grande Range Camps, located in New Mexico, do not currently have operation permits from the New Mexico Environmental Department (NMED).

CRITERIA: Installations/CW facilities are required to comply with state and local water quality regulations (EO 12088, Section 1-1 and 42 USC 300h-7(h)). All public water supply system projects must be approved in writing by the NMED (20 NMAC 7.1,501).

FINDING COMMENTS: Dona Ana Range camp has two wells, more than 15 service connections, and serves more than 25 people at least 60-days per year, qualifying it as a public water system. McGregor Range camp purchases water from El Paso and provides retreatment (re-chlorination) and therefore, is to be considered a consecutive water supplier under New Mexico regulation. There has been correspondence with the NMED regarding this issue, however, the outcome is unclear. Oro Grande Range camp receives water from White Sands Missile Range, it has more than 15 service connections, and provides re-chlorination, therefore it qualifies as a public water system.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Submit permit applications to the NMED for all three Range camp systems. Estimated Cost: \$1,500.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 1500

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE is awaiting analysis from DERA drilling project and will then apply for groundwater and stormwater permits.

WQ.10.2.TX #1 I STATE CORRECTIVE ACTION Water Quality

FINDING ID: WQ-KS-08

MANUAL QUESTION NUMBER: WQ-010-002-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: INST

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Detailed inspection of storage tanks had not occurred since 1995. The Texas Natural Resource Conservation Commission (TNRCC) requires that all storage tanks be inspected annually and records of inspection be kept for a minimum of 5 years.

CRITERIA: Public drinking water systems must meet specific operating requirements (30 TAC, Section 290.44(a)(4), 290.46(1), (n) through (q), and (t) through (w)) [Revised June 1997]. Ground and elevated storage tanks must be inspected annually [30 TAC, Chapter 290.46 (p) (1)].

FINDING COMMENTS: Distribution system operators currently perform periodic inspections covering some, but not all, requirements. Work orders had been filed to let an annual contract for inspection of all storage facilities (WO #FE011706J960212 BAAF; #FE011716J960212 Bliss; #FE011726J960212 Site Monitor; and #FE011746J960212 Range Camp Systems).

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Develop recurring annual contracts for inspection of all storage facilities in accordance with TNRCC requirements. Estimated Cost: \$10,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 10000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE has 2 certified divers. The inspections can currently be done in-house with rented equipment. There is no funding to initiate this corrective action.



WQ.10.2.TX #2 I STATE CORRECTIVE ACTION      Water Quality

FINDING ID:    WQ-KS-01

MANUAL QUESTION NUMBER:    WQ-010-002-TX

FINDING CATEGORY:    CLASS I

FINDING TYPE:    Negative

EXISTING NOV:    YES

LOCATION:    DPWL

IFS FACILITY NUMBER:    01318

FACILITY TYPE:    UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION:    The potable water storage reservoir at Fort Bliss Main Post (Bldg# 1318) is leaking. Pooling rainwater on top of the reservoir is infiltrating into the reservoir. In addition, water is seeping through a wall of the reservoir into the computer room in building #1318.

CRITERIA:    Public drinking water systems must meet specific operating requirements (30 TAC, Section 290.44(a)(4), 290.46(1), (n) through (q), and (t) through (w)) [Revised June 1997]. Clear wells and potable water storage tanks shall be thoroughly tight against leakage [TAC 30, Section 290.43 (c) (6)].

FINDING COMMENTS:    The State of Texas issued a Notice of Violation (NOV) for this facility on 29 April 1994. The NOV states "this facility must be repaired or replaced". The Texas Historical Society has declared the existing facility and attached building #1318, to be a historical site and as a result any new construction must be identical in appearance to the existing facility. Engineering design plans already exist for a replacement structure but the project is awaiting funding. Memorandum of Agreement (MOA) exist to mitigate.

STATUS OF CORRECTION:    NO ACTION YET

CORRECTIVE ACTION:    Develop a 1391 packet for construction/repair the storage tank. The leaking reservoir must be repaired or replaced. There are three reservoirs. Estimated Cost: \$1,000,000 each reservoir.

CORRECTIVE ACTION TYPE:    CORRECTIVE PROJECT

COST: 3000000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS:    INSTALLATION COMMENT:    DPWL will prepare the 1391 packet and DOE will add comments in the narrative section.

WQ.10.13.TX #1 I STATE CORRECTIVE ACTION Water Quality

FINDING ID: WQ-KS-06

MANUAL QUESTION NUMBER: WQ-010-013-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: INST

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: According to personnel, Fort Bliss did not have a cross-connection control and backflow prevention program. A contract was currently in place to develop a cross-connection control and backflow prevention program. The Directorate of Public Works and Logistics (DPWL) personnel are trained to inspect and test backflow prevention devices and currently have equipment necessary to perform this function.

CRITERIA: Public water supply systems must protect against cross or interconnections (30 TAC, Section 290.46(i) through (k)).

FINDING COMMENTS: Measures had already been taken by DPWL and a contractor to formulate and implement a cross-connection control and backflow prevention program. The contractor just begun the building survey to identify existing backflow prevention devices and identify all locations which required backflow prevention devices. Testing of the existing backflow prevention devices will not be done during this stage. The contracted project that is currently underway to correct this problem is scheduled to be completed by the year 2003.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Continue execution of the existing contract for a cross-connection control program. Conduct a survey of all installation buildings to identify/test existing backflow prevention devices and identify all locations which required backflow prevention devices. Estimated Cost: \$100,000. The results of this survey will determine the type and amount of backflow prevention devices required. Estimated Cost: \$100-15,000 per device, depending on type/size. Annual operation and maintenance for these devices will cost about 50,000/year.

CORRECTIVE ACTION TYPE: OPERATIONAL OR PROCEDURAL CHANGE

COST: 165000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENTS: The survey will be 50% complete by August 1998. In progress.

WQ.30.1.TX #1 I STATE CORRECTIVE ACTION Water Quality

FINDING ID: WQ-KS-04

MANUAL QUESTION NUMBER: WQ-030-001-TX

FINDING CATEGORY: CLASS I

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DOE

IFS FACILITY NUMBER: 00515

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Copies of chemical analysis monitoring for all Fort Bliss water systems for years prior to 1993, were not available for review. There is a requirement to maintain these records for a minimum of 10 years.

CRITERIA: Public water systems must meet specific recordkeeping and reporting requirements (30 TAC, Section 290.112). Specifically, chemical records must be maintained for 10 years.

FINDING COMMENTS:

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Contact the Texas Natural Resources Conservation Commission (TNRCC) for copies of old records.  
Estimated Cost: \$0.

CORRECTIVE ACTION TYPE: ADMINISTRATIVE OR POLICY CHANGE

COST: 0

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENTS: Corrective action in progress.

WQ.15.2.TX #1 II STATE CORRECTIVE ACTION Water Quality

FINDING ID: WQ-RV-09

MANUAL QUESTION NUMBER: WQ-015-002-TX

FINDING CATEGORY: CLASS II

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: PVNTMED SVC

IFS FACILITY NUMBER: 00118

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: The Preventive Medicine Service (PVNTMED Svc) at William Beaumont Army Medical Center (WBAMC) currently performs the bacteriological monitoring and record keeping requirements for the installation and range camps. The PVNTMED Svc manpower will be downsized in February 1998. With this shortage of manpower, there is a potential that PVNTMED Svc can not perform the bacteriological monitoring/sampling requirements for the installation.

CRITERIA: Public water systems must determine compliance with the MCL for microbiological contaminants (30 TAC, Sections 290.105 and 290.106(a)).

FINDING COMMENTS: Since the Directorate of Environment (DOE) has the overall responsibility to meet the Texas Natural Resource Conservation Commission (TNRCC) monitoring requirements at the installation, they should start investigating other alternatives to comply with the bacteriological sampling. The DOE, Directorate of Public Works and Logistics (DPWL) and PVNTMED Svc should get together to resolve this issue.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: (1) Provide or hire a civilian technician to help run both PVNTMED Svc's bacteriological laboratory and the Installation water-monitoring program. This would help resolve the Texas Department of Health's concern regarding frequent laboratory personnel turnover. Keeping the laboratory under PVNTMED Svc's control would allow the program to retain the current flexibility and high level of service at a reasonable cost. Estimated Cost: \$25,000 yearly salary. (2) Another alternative is to contract out the installation's bacteriological monitoring/sampling program. Estimated Cost: \$20,000 annually.

CORRECTIVE ACTION TYPE: OTHERS

COST: 25000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: A Memo of Agreement is being developed between PM, DPWL, DOE, PA, and the Garrison Command. Current staffing is adequate for fiscal year 1998.

WQ.1.5.A #1 III ARMY/DOD CORRECTIVE ACTION Water Quality

FINDING ID: WQ-KS-05

MANUAL QUESTION NUMBER: WQ-001-005-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: INST

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: According to Fort Bliss personnel, the installation does not have a written, working plan for emergency contingencies concerning the water systems.

CRITERIA: Installations are required to have an Standard Operating Procedure (SOP) for alerting personnel in national or local emergencies or times of actual or anticipated noncompliance (AR 420-49, para 4-3a).

FINDING COMMENTS: This SOP will serve as a guide in addressing actual or potential drinking water contamination or shortages. This SOP should address emergencies such as floods, hurricanes, drought, severe contamination of the water source and systems, and list each person's responsibilities, actions, and personnel to contact. Also, included in the SOP, alternate water sources that can be used in emergencies. Excellent guidance is available via the State of Washington publications, Emergency Planning Instructional Guide, and the Emergency Planning Workbook and American Water Works Manual M19. Measures had already been taken by the Directorate of Environment and a contractor to develop the written drinking water emergency SOP (scheduled to be completed September 1998). Each person/office with emergency responsibilities should have a copy of the plan readily available and the SOP should be tested on a periodic basis to confirm that the planned procedures will remedy the situation in an effective manner.

STATUS OF CORRECTION: INITIATED/WORK REQUEST SUBMITTED

CORRECTIVE ACTION: Develop written drinking water emergency SOP.  
Estimated Cost: \$10,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 10000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENTS: DOE is developing the SOP in conjunction with other water projects. Corrective action in progress.



WQ.2.1.A #1 III ARMY/DOD CORRECTIVE ACTION Water Quality

FINDING ID: WQ-KS-07

MANUAL QUESTION NUMBER: WQ-002-001-A

FINDING CATEGORY: CLASS III

FINDING TYPE: Negative

EXISTING NOV: NO

LOCATION: DPWL

IFS FACILITY NUMBER: INST

FACILITY TYPE: UTILITIES & GROUND IMPROVEMENTS

FINDING DESCRIPTION: Although sections of the water distribution system are periodically flushed based on consumer complaint, the installation does not have an effective comprehensive program for flushing the distribution system.

CRITERIA: Water distribution system flushing shall be performed on an annual basis according to a written plan (AR 420-49, TB MED 576, paragraph 4-3b).

FINDING COMMENTS:

STATUS OF CORRECTION: NO ACTION YET

CORRECTIVE ACTION: Develop and implement a written comprehensive flushing program for the potable water distribution system in accordance with TM 5-660. The plan should address the following: systematic flushing of the distribution system from water supply entry points outward to the extremities of the distribution system; documentation of flushing events; and reason for flushing. Comprehensive flushing of the entire distribution system should be conducted at least annually. Estimated cost of plan: \$8,000.

CORRECTIVE ACTION TYPE: OTHERS

COST: 8000

1383 PROJECT NUMBER:

CORRECTIVE ACTION COMMENTS: INSTALLATION COMMENT: DOE will write the plan in conjunction with ongoing projects.

**APPENDIX A**  
**GLOSSARY OF ACRONYMS**

AAF	Army Airfield
AAFES	U.S. Army & Air Force Exchange System
ACM	Asbestos Containing Material
ADA	Air Defense Artillery
AR	Army Regulation
ARPA	Archaeological Resources Protection Act
AST	Aboveground Storage Tank
AVN	Aviation
BASOPS	Base Operations
BDE	Brigade
BLM	Bureau of Land Management
BN	Battalion
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CAV	Cavalry
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERL	U.S. Army Construction Engineering Research Laboratory
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CG	Commanding General
CO	Company
CPO	Civilian Personnel Office
CWA	Clean Water Act
DA	Department of Army
DCFA	Directorate of Community & Family Activities
DECA	Defense Commissary
DERA	Defense Environmental Restoration Account
DET	Detachment
DFSP	Defense Fuel Supply Point
DFR	Draft Findings Report
DOD	Department of Defense
DOIM	Directorate of Information Management
DOT	Department of Transportation
DPS	Defense Printing Service
DPTSM	Directorate of Plans, Training, Security, & Mobilization
DPWL	Directorate of Public Works and Logistics
DRMO	Defense Reutilization and Marketing Office
EA	Environmental Assessment
ECAR	Environmental Compliance Assessment Report
ECAS	Environmental Compliance Assessment System
ECS	Equipment Concentration Site
ED	Environmental Department

EIS	Environmental Impact Statement
ENGR	Engineer
EO	Executive Order
EOD	Explosive Ordnance Demolition
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning Community Right-to-Know Act
EQCC	Environmental Quality Control Committee
ESA	Endangered Species Act
FA	Field Artillery
FFA	Federal Facility Agreement
FFCA	Federal Facilities Compliance Act
FFID	Federal Facility Identification Number
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FONSI	Finding of No Significant Impact
FOTW	Federally-Owned Treatment Works
FRP	Facility Response Plan
GAF	German Air Force
GIS	Geographic Information System
GMP	Good Management Practice
GSA	General Services Administration
HAZCOM	Hazard Communication
HAZMIN	Hazardous Waste Minimization
HM	Hazardous Materials
HPP	Historic Preservation Plan
HQDA	Headquarters Department of the Army
HW	Hazardous Waste
H/S	Health and Safety
ICAP	Installation Corrective Action Plan
ICUZ	Installation Compatible Use Zone
IFS	Integrated Facility System
IG	Inspector General
INF	Infantry
INRMP	Integrated Natural Resources Management Plan
INST	Installation
IPMC	Installation Pest Management Coordinator
IPMP	Installation Pest Management Plan
IRP	Installation Restoration Program
ISCP	Installation Spill Contingency Plan
ISSA	Installation Service Support Agreement
ITAM	Integrated Training Area Management
LBP	Lead-Based Paint
LEC	Law Enforcement Command
MACOM	Major Command
MEDCOM	U.S. Army Medical Command
MEDDAC	Medical Activity
MI	Military Intelligence
MOA	Memorandum of Agreement

MOGAS	Motor Gasoline
MOI	Memorandum of Instruction
MP	Management Practice
MSDS	Material Safety Data Sheet
MSWLF	Municipal Solid Waste Landfill
MULT	Multiple
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMAQCR	New Mexico Air Quality Control Regulations
NMWSR	New Mexico Water Standards Regulations
NOV	Notice of Violation
NPDES	National Pollutant Discharge and Elimination System
NR	Natural Resource
NSN	National Stock Number
OB/OD	Open Burning/Open Detonation
OSHA	Occupational Safety and Health Administration
OWS	Oil Water Separator
PAO	Public Affairs Office
PCB	Polychlorinated Biphenyls
POC	Point of Contact
POL	Petroleum, Oils, and Lubricants
POTW	Publicly-Owned Treatment Works
ppm	parts per million
PVNTMED	Preventive Medicine
PX	Post Exchange
QA	Quality Assurance
QC	Quality Control
QRP	Qualifying Recycling Program
RCRA	Resource Conservation and Recovery Act
REC	Record of Environmental Consideration
RFA	RCRA Facility Assessment
RMW	Regulated Medical Waste
RRRP	Resource Recovery and Recycling Program
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SH	Substantial Harm
SHPO	State Historic Preservation Office
SIG	Signal
SJA	Staff Judge Advocate
SOP	Standing Operating Procedure
SPCCP	Spill Prevention, Control, and Countermeasure Plan
STP	Sewage Treatment Plant
SVOC	Semivolatile Organic Compound
SWMU	Solid Waste Management Unit
SWPPP	Storm Water Pollution Prevention Plan
TA	Training Area
TAC	Texas Authority Code

TB	Technical Bulletin
TCLP	Toxicity Characteristic Leaching Procedure
TEAM	The Environmental Assessment and Management
TMP	Transportation Motor Pool
TNRCC	Texas Natural Resource Conservation Commission
TRI	Toxic Release Inventory
TSC	Training Support Center
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage and/or Disposal Facility
TWC	Texas Water Commission
USAADAC	U.S. Army Air Defense Artillery Center
USACE	U.S. Army Corps of Engineers
USACERL	U.S. Army Construction Engineering Research Laboratory
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USAEC	U.S. Army Environmental Center
USAMEDDAC	U.S. Army Medical Department Activity
USARC	U.S. Army Reserve Command
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WBAMC	William Beaumont Army Medical Center
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

## APPENDIX B

### SPECIFIC FACILITIES ASSESSED AND RESULTANT FINDINGS

The table contained in this appendix lists the facilities assessed by the ECAS team and the resultant finding number(s). The IFS number was coded as INST or MULT where appropriate. Definitions of acronyms are found in Appendix A. If no finding number is specified, no problems were discovered at that facility.

#### MEDIA KEY:

A	Air Emissions
CR	Cultural Resources
HM	Hazardous Materials
HW	Hazardous Waste
O1	Other - Environmental Impacts (NEPA)
O2	Other - Environmental Noise
O3	Other - Installation Restoration Program (IRP)
O4	Other - Pollution Prevention
O5	Other - Program Management
PM	Pesticide Management
PO	Petroleum, Oils, and Lubricants (POL)
SO	Solid Waste
ST	Storage Tanks
T1	Toxics - Polychlorinated Biphenyls (PCBs)
T2	Toxics - Asbestos
T3	Toxics - Radon
T4	Toxics - Lead Based Paint (LBP)
WA	Wastewater
WQ	Water Quality

APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
00002	DPTMS	05-SN-01	O5, SO
00011	DCA		O4, SO
00014	PREVENTIVE MEDICINE		PM, WQ
00015	PUBLIC AFFAIRS OFFICE	02-DB-005	O2
00021	AAFES		HM
00058	PRINTING SHOP		SO
00199	AAFES		SO
00250	OFFICERS CLUB	SO-KB-03	SO
00315	CHURCH		SO
00118	PVNTMED SERVICE	WQ-RV-09	WQ
00515	INSTALLATION	A-SC-01	A
00515	DIRECTORATE OF ENVIRONMENT	A-SC-09	A
00515	DIRECTORATE OF ENVIRONMENT	WQ-KS-04	WQ
00515	DIRECTORATE OF ENVIRONMENT	O2-DB-004	O2
00515	DIRECTORATE OF ENVIRONMENT	T4-JH-01	T4
00515	DIRECTORATE OF ENVIRONMENT	T2-JH-01	T2
00515	DIRECTORATE OF ENVIRONMENT	T2-JH-02	T2
00515	DIRECTORATE OF ENVIRONMENT	A-SC-07	A
00515	DIRECTORATE OF ENVIRONMENT		HM, O4, PM, SO, T2, T4
00516	SAFETY OFFICE	HM-JH-07	HM
00624	DIRECTORATE OF ENVIRONMENT	O1-TS-03	O1
00624	DPWL-DOE	WA-KP-11	WA
00624	DIRECTORATE OF ENVIRONMENT	O1-TS-01	O1
00624	DIRECTORATE OF ENVIRONMENT	O1-TS-04	O1

Ft Bliss ECAR  
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APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
00624	DIRECTORATE OF ENVIRONMENT	SO-KB-02	SO
00624	DIRECTORATE OF ENVIRONMENT	NR-TS-02	NR
00624	DIRECTORATE OF ENVIRONMENT	NR-TS-03	NR
00624	DIRECTORATE OF ENVIRONMENT	NR-TS-01	NR
00624	DIRECTORATE OF ENVIRONMENT	01-TS-02	01
00624	DIRECTORATE OF ENVIRONMENT	01-TS-05	01
00624	DIRECTORATE OF ENVIRONMENT	01-TS-06	01
00624	DIRECTORATE OF ENVIRONMENT	CR-CM-01	CR
00624	DIRECTORATE OF ENVIRONMENT	CR-CM-02	CR
00624	DIRECTORATE OF ENVIRONMENT	03-JG-02	03
00624	DOE-SOLID WASTE MGMT PROGRAM	SO-KB-09	SO
00624	DIRECTORATE OF ENVIRONMENT	NR-TS-04	NR
00624	DIRECTORATE OF ENVIRONMENT	05-SN-03	05
00624	DIRECTORATE OF ENVIRONMENT	05-SN-04	05
00624	DIRECTORATE OF ENVIRONMENT	CR-CM-05	CR
00713	DCA-CHILD CARE		PM
00777	DPWL	05-SN-02	05, PM
00820	DCA	HW-MB-02	HM, HW, PO
00820	DCA, AUTO CRAFT SHOP	SO-MB-02	HM, HW, PO, SO
00820	AUTO CRAFT SHOP	WA-KP-06	HM, HW, PO, WA
00820	AUTO CRAFT SHOP	SO-KB-03	HM, HW, PO, SO
01002	MCGREGOR DINING FACILITY		PM
01005	MESS HALL		SO



APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
01006	MESS HALL		PM, SO
01031	MCGREGOR DINING FACILITY		PM
01050	11 <sup>TH</sup> BRIGADE		HM
01056	31 <sup>ST</sup> ADA BDE/31 <sup>ST</sup> CSH	SO-DI-01	HM, SO
01063	DPWL		ST
01073	DPWL ROADS/GROUNDS MAINTENANCE	PO-KP-06	HM, HW, PO
01075	DPWL ROADS/GROUNDS MAINTENANCE	PO-KP-05	HW, PO
01076	GAFADS		HW, PO
01104	RAYTHEON		HW, PO
01105	RAYTHEON		HW, PO
01109	INSTALLATION FOOD SERVICES		PM
01112	DPWL CENTRAL CHLORINE STORAGE	A-SC-03	A
01116	DPWL REFRIGERATION SHOP	A-SC-08	A, HM, HW, PO
01124	CARPENTER SHOP		SO
01134	DPWL GSA MOTORPOOL		HW, PO
01159	DPWL HEAT SHOP	A-SC-04	A
01235	DPWL ENTOMOLOGY SHOP	HW-MB-05	HW
01273	MCGREGOR DINING FACILITY		SO
01288	DPWL ELECTRIC SHOP		HM, HW, PO
01318	DPWL	WQ-KS-01	WQ
01326	DPWL-GSA MOTORPOOL	ST-BN-06	ST
01334	DPWL-GSA MOTORPOOL	SO-MB-01	HM, SO

APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
01334	DPWL-GSA MOTORPOOL	PO-KP-03	HM, PO
01336	RECYCLING CENTER	SO-KB-05	O4, SO
01378	DPWL-LOCOMOTIVE MAINT FACILITY	PO-KP-04	HM, HW, PO
01610	CLASS VI STORE		SO, ST
01611	VETERINARY MEDICINE FACILITY		HM, PM
01680	POPEYES RESTAURANT		SO
01717	COMMISSARY		PM, SO
01730	CHILD CARE CENTER		SO
01735	AAFES/PXTRA	HM-JH-05	HM, PM, SO
02021	DEPARTMENT OF CONTRACTING	O4-PA-01	O4
02021	DEPARTMENT OF CONTRACTING	CR-CM-03	CR
02021	DEPARTMENT OF CONTRACTING	PM-MLB-18	PM
02423	2/43 108 <sup>TH</sup> ADA	WA-KP-03	HM, WA
02449	MCGREGOR DINING FACILITY		PM
02464	11 <sup>TH</sup> ADA	ST-BN-02	ST
02475	MCGREGOR DINING FACILITY		SO
02496	TROOP MEDICAL CLINIC-XRAY AREA		HM
02496	OCCUPATIONAL HEALTH	PM-MLB-03	PM, WA
02515	DPWL		A, HM, HW, PO, SO, WA
02519	DPWL		A, HM, HW, PO, SO, WA
02527	PURCHASING		SO
02528	DPWL SUPPLY		HM

APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
02529	DPWL PAINT SHOP/BOOTH	PO-KP-01	A, HM, HW, PO, SO, WA
02588	DPWL COMBAT & HEAVY EQUIPMENT MAINT COMBAT ARTILLERY SHOP	PO-KP-02	A, HM, HW, PO, SO, WA
02592	DPWL-MECHANICAL BRANCH		A, HM, HW, PO, SO, WA
02602	MCGREGOR DINING FACILITY		PM
02680	11 <sup>TH</sup> ADA 268 <sup>TH</sup> SIGNAL	SO-DI-02	PO, SO, WA
02642	2 <sup>ND</sup> BATTALION 43 <sup>RD</sup> ADA		ST
02643	2/1 BATTALION 35 <sup>TH</sup> ADA 178 <sup>TH</sup> MAINTENANCE FACILITY		PO, WA
02656	108 <sup>TH</sup> ADA BRIGADE		ST
02661	31 <sup>ST</sup> BRIGADE		HM
02901	MCGREGOR DINING FACILITY		PM
02942	108 <sup>TH</sup> ADA 2/43 BATTALION	ST-BN-03	HM, HW, PO, ST
02949	BOWLING CENTER		PM, SO
02954	DENTAL CLINIC #3		HM, WA
02962	35 <sup>TH</sup> BRIGADE 2-1 ADA BATTALION		PO, WA,
02970	35 <sup>TH</sup> BRIGADE 2-1 ADA BATTALION		ST
02971	35 <sup>TH</sup> BRIGADE 2-1 ADA BATTALION		ST
03007	GOLF COURSE PESTICIDE MIXING/STORAGE FACILITY	PM-MLB-04	PM
03007	GOLF COURSE PESTICIDE MIXING/STORAGE FACILITY	PM-MLB-05	PM

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APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
03007	GOLF COURSE PESTICIDE MIXING/STORAGE FACILITY	PM-MLB-06	PM
03007	GOLF COURSE PESTICIDE MIXING/STORAGE FACILITY	PM-MLB-07	PM
05898	DPWL/POWER PLANT	HW-KM-05	HW
04674	MCGREGOR DINING FACILITY		PM, SO
05115	HAZMART CENTER		O4, SO
05898	DPWL/POWER PLANT	HW-KM-06	HW
06077	VETERINARY TREATMENT FACILITY		HM, SO, WA
06900	TESCO-BIGGS AAF-OTSA		HM
07113	BAMC-CHILD CARE		PM
07777	WBAMC/RADIOLOGY	HW-KM-01	HM, HW
07777	WBAMC/CLINICAL LAB	HW-KM-02	HM, HW
07777	WBAMC/PHARMACY	HW-KM-03	HM, HW
07777	WBAMC/RADIOLOGY-ER	SO-KM-01	HM, SO
07777	WBAMC	HM-JH-04	A, HM, PO, SO, ST
08276	MATES-DONA ANA RANGE CAMP		HW, O4, PO
08659	OTO GRABDE RANGE CAMP		ST
08688	ORO GRANDE RANGE CAMP		ST
08690	ORO GRANDE RANGE CAMP		ST
08691	LOCKHEED MARTIN MISSILE MAINTENANCE FACILITY	PO-KP-07	HW, O4, PO
08777	DPWL	CR-CM-04	CR
09482	1 <sup>ST</sup> BATTALION MAINT FACILITY		HW, O4, PO

APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
09500	RANGE CONTROL-MCGREGOR RANGE		O2
09501	1 <sup>ST</sup> CAS BATTALION	O2-DB-002	O2
09510	MCGREGOR DINING FACILITY		PM
09521	AR AMSA #12		HW, O4, PO
09522	MCGREGOR RANGE MOTORPOOL		ST
09585	1 <sup>ST</sup> BATTALION MAINTENANCE FACILITY		HW, O4, PO
11000	41 <sup>ST</sup> EOD	HW-MB-03	HW
11005	RAYTHEON MAINTENANCE FACILITY	WA-KP-04	WA
11018	DPWL POL TANK FARM	A-SC-10	A, ST
11024	BIGGS BULK POL	ST-BN-04	ST
11108	204 <sup>TH</sup> MILITARY BATTALION		A, HM, HW, PO, SO, WA
11108	DPWL	HW-MB-01	HW, PO
11108	DPWL AVIATION MAINTENANCE	WA-KP-01	WA
11108	DPWL AVIATION MAINTENANCE	WA-KP-02	WA
11108	DPWL-BIGGS ARMY AIRFIELD		HM
11108	C CO. 204 <sup>TH</sup> MI BN	WA-KP-05	WA
11126	DRMO		HM
11156	WBAMC/MATERIALS BRANCH	HW-KM-04	HW
11189	AUTO CRAFT SHOP-BIGGS		HW, PO
11210	AVIATION DIVISION	O2-DB-003	O2
11211	BIGGS AAF-FIRE STATION #4		HM, PM
11236	PHOTO SHOP-BIGGS		HW, PO

APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
11304	TESCO		HM, HW, PO
11602	JTF-6		HM, HW, PO
11614	DRMO		HW, HM, PO, SO
11631	EL PASO FEDERAL CORRECTIONAL INSTITUTION	PM-MLB-09	PM
11631	EL PASO FEDERAL CORRECTIONAL INSTITUTION	PM-MLB-10	PM
11631	EL PASO FEDERAL CORRECTIONAL INSTITUTION	PM-MLB-11	PM
60-36	ENTOMOLOGY EQUIPMENT YARD 9B	PM-MLB-13	PM
60-36	ENTOMOLOGY EQUIPMENT YARD 9B	PM-MLB-16	PM
60-76	ENTOMOLOGY EQUIPMENT YARD	PM-MLB-12	PM
60-76	ENTOMOLOGY EQUIPMENT YARD 9B	PM-MLB-14	PM
60-76	ENTOMOLOGY EQUIPMENT YARD 9B	PM-MLB-15	PM
60-76	ENTOMOLOGY EQUIPMENT YARD 9B	PM-MLB-17	PM
INST	INSTALLATION	PO-MB-01	PO
INST	INSTALLATION	PM-MLB-01	PM
INST	DPWL	WQ-KS-05	WQ
INST	DPWL	WQ-KS-07	WQ
INST	IRP SITES		O3
INST	INSTALLATION WIDE	PM-MLB-02	PM
LAGOON	MCGREGOR RANGE BASE CAMP	WA-KP-08	WA
LAGOON	ORA GRANDE RANGE	WA-KP-10	WA
LAGOON	MCGREGOR RANNGE BASE CAMP	WA-KP-09	WA
LAGOONS	SEWAGE LAGOONS	WA-KP-07	WA

APPENDIX B - FACILITIES ASSESSED AND RESULTANT FINDINGS

FACILITY NO.	LOCATION	FINDING ID	MEDIA ASSESSED
LANDFILL	DIRECTORATE OF ENVIRONMENT	SO-KB-01	SO
LANDFILL	DPWL	SO-KB-06	SO
LANDFILL	DIRECTORATE OF ENVIRONMENT	SO-KB-07	SO
MULT	DPWL	SO-KB-04	SO
MULT	DPWL-POL TANK FARM	ST-SC-01	ST
MULT	DIRECTORATE OF ENVIRONMENT	WQ-KS-02	WQ
MULT	ORO GRANDE AND DONA ANA RANGES	A-SC-02	A
MULT	DIRECTORATE OF ENVIRONMENT	O3-JG-01	O3
MULT	DSERTS-DIRECTORATE OF ENVIRONMENT		O3
MULT	DPWL	SO-KB-03	SO
MULT	AAFES FOOD SERVICE FACILITIES	PM-MLB-08	PM
MULT	DPWL	HM-JH-01	HM
MULT	INSTALLATION SAFETY OFFICE	HM-JH-02	HM
MULT	DPWL	HM-JH-03	HM
MULT	AAFES	HM-JH-06	HM
OPEN DETONATION	41 <sup>ST</sup> EOD		HW

APPENDIX C - FINDINGS BY FACILITY TABLE

FACILITY NO.	LOCATION	QUESTION NO.	FINDING ID	CLASS	PAGE NO.
00002	DPTMS	05-008-003-A	05-SN-01	PO	3-79
00015	PUBLIC AFFAIRS OFFICE		02-DB-005	03	3-67
00118	PVNTMED SERVICE	WQ-015-002-TX	WQ-RV-09	02	3-168
00515	INSTALLATION	A-001-001	A-SC-01	01	3-4
00515	DIRECTORATE OF ENVIRONMENT	A-090-006	A-SC-09	01	3-6
00515	DIRECTORATE OF ENVIRONMENT	WQ-030-001-TX	WQ-KS-04	01	3-167
00515	DIRECTORATE OF ENVIRONMENT	02-001-003-A	02-DB-004	03	3-64
00515	DIRECTORATE OF ENVIRONMENT	T4-001-003-A	T4-JH-01	03	3-146
00515	DIRECTORATE OF ENVIRONMENT	T2-001-003-A	T2-JH-01	03	3-140
00515	DIRECTORATE OF ENVIRONMENT	T2-001-004-A	T2-JH-02	03	3-142
00515	DIRECTORATE OF ENVIRONMENT	A-001-002-A	A-SC-07	PO	3-12
00516	SAFETY OFFICE	HM-005-001-TX	HM-JH-07	H/S	3-32
00624	DIRECTORATE OF ENVIRONMENT	01-005-001	01-TS-03	01	3-56
00624	DPWL-DOE	WA-010-003	WA-KP-11	02	3-159
00624	DIRECTORATE OF ENVIRONMENT	01-005-012-A	01-TS-01	02	3-59
00624	DIRECTORATE OF ENVIRONMENT	01-005-003	01-TS-04	02	3-58
00624	DIRECTORATE OF ENVIRONMENT	SO-001-003-A	SO-KB-02	03	3-121
00624	DIRECTORATE OF ENVIRONMENT	NR-001-003-A	NR-TS-02	03	3-50
00624	DIRECTORATE OF ENVIRONMENT	NR-020-002-A	NR-TS-03	03	3-53
00624	DIRECTORATE OF ENVIRONMENT	NR-001-012-A	NR-TS-01	03	3-52



APPENDIX C - FINDINGS BY FACILITY TABLE

FACILITY NO.	LOCATION	QUESTION NO.	FINDING ID	CLASS	PAGE NO.
00624	DIRECTORATE OF ENVIRONMENT	01-001-002-A	01-TS-02	03	3-60
00624	DIRECTORATE OF ENVIRONMENT	01-005-016-A	01-TS-05	03	3-62
00624	DIRECTORATE OF ENVIRONMENT	01-005-008-A	01-TS-06	03	3-61
00624	DIRECTORATE OF ENVIRONMENT	C-020-001	CR-CM-01	03	3-20
00624	DIRECTORATE OF ENVIRONMENT	C-002-001-A	CR-CM-02	03	3-19
00624	DIRECTORATE OF ENVIRONMENT	03-001-002-A	03-JG-02	PO	3-73
00624	DOE-SOLID WASTE MGMT PROGRAM	SO-001-002-A	SO-KB-09	PO	3-126
00624	DIRECTORATE OF ENVIRONMENT	NR-001-007-A	NR-TS-04	PO	3-54
00624	DIRECTORATE OF ENVIRONMENT	05-008-007-A	05-SN-03	PO	3-80
00624	DIRECTORATE OF ENVIRONMENT	05-015-007-A	05-SN-04	PO	3-81
00624	DIRECTORATE OF ENVIRONMENT	C-001-002-A	CR-CM-05	PO	3-21
00777	DPWL	05-008-002-A	05-SN-02	03	3-78
00820	DCA	HW-010-001	HW-MB-02	01	3-39
00820	DCA, AUTO CRAFT SHOP	SO-003-001-TX	SO-MB-02	01	3-115
00820	AUTO CRAFT SHOP	WA-010-001	WA-KP-06	01	3-156
01056	31 <sup>ST</sup> ADA BDE/31 <sup>ST</sup> CSH	SO-003-001-TX	SO-DI-01	01	3-112
01073	DPWL ROADS/GROUNDS MAINTENANCE	PO-020-002	PO-KP-06	01	3-103
01075	DPWL ROADS/GROUNDS MAINTENANCE	PO-020-001	PO-KP-05	03	3-109
01112	DPWL CENTRAL CHLORINE STORAGE	A-001-004	A-SC-03	02	3-9
01116	DPWL REFRIGERATION SHOP	A-001-002-A	A-SC-08	PO	3-13
01159	DPWL HEAT SHOP	A-000-500-4T	A-SC-04	01	3-3

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# APPENDIX C - FINDINGS BY FACILITY TABLE

FACILITY NO.	LOCATION	QUESTION NO.	FINDING ID	CLASS	PAGE NO.
01235	DPWL ENTOMOLOGY SHOP	HW-010-001	HW-MB-05	01	3-42
01318	DPWL	WQ-010-002-TX	WQ-KS-01	01	3-164
01326	DPWL-GSA MOTORPOOL	ST-060-001	ST-BN-06	01	3-130
01334	DPWL-GSA MOTORPOOL	SO-003-001-TX	SO-MB-01	01	3-114
01334	DPWL-GSA MOTORPOOL	PO-020-001	PO-KP-03	03	3-107
01378	DPWL-LOCOMOTIVE MAINT FAC	PO-020-001	PO-KP-04	03	3-108
01735	AAFES	HM-002-001	HM-JH-05	H/S	3-28
02021	DEPARTMENT OF CONTRACTING	C-005-002	CR-CM-03	01	3-15
02021	DEPARTMENT OF CONTRACTING	PM-001-007-A	PM-MLB-18	03	3-87
02423	2/43 108 <sup>TH</sup> ADA	WA-010-001	WA-KP-03	01	3-153
02464	11 <sup>TH</sup> ADA	ST-005-001	ST-BN-02	03	3-134
02496	OCCUPATIONAL HEALTH	PM-002-001	PM-MLB-03	PO	3-100
02529	DPWL PAINT BOOTH	PO-020-001	PO-KP-01	03	3-105
02588	DPWL COMBAT AND HEAVY EQUIPMENT MAINTENANCE	PO-020-001	PO-KP-02	03	3-106
02680	11 <sup>TH</sup> ADA 268 <sup>TH</sup> SIGNAL	SO-003-001-TX	SO-DI-02	01	3-113
02942	108 <sup>TH</sup> ADA 2/43 BATTALLION	ST-005-001	ST-BN-03	03	3-137
03007	GOLF COURSE PESTICIDE MIXING/STORAGE FACILITY	PM-045-007-A	PM-MLB-04	03	3-96
03007	GOLF COURSE PESTICIDE MIXING/STORAGE FACILITY	PM-045-007-A	PM-MLB-06	03	3-97
03007	GOLF COURSE PESTICIDE MIXING/STORAGE FACILITY	PM-010-002-TX	PM-MLB-05	01	3-83
05898	DPWL/POWER PLANT	HW-010-001	HW-KM-05	01	3-44

APPENDIX C - FINDINGS BY FACILITY TABLE

FACILITY NO.	LOCATION	QUESTION NO.	FINDING ID	CLASS	PAGE NO.
05898	DPWL/POWER PLANT	HW-002-001	HW-KM-06	01	3-37
060-76	ENTOMOLOGY EQUIPMENT YARD	PM-045-002	PM-MLB-12	03	3-93
07777	WBAMC/RADIOLOGY	HW-055-005	HW-KM-01	01	3-45
07777	WBAMC/CLINICAL LAB	HW-070-005	HW-KM-02	01	3-47
07777	WBAMC/PHARMACY	HW-002-001	HW-KM-03	01	3-35
07777	WBAMC/RADIOLOGY-ER	SO-002-001-A	SO-KM-01	03	3-122
07777	WBAMC	HM-002-001	HM-JH-04	H/S	3-26
08691	LOCKHEED MARTIN MISSILE MAINTENANCE FACILITY	PO-020-001	PO-KP-07	03	3-110
08777	DPWL	C-005-003	CR-CM-04	01	3-17
09501	1 <sup>ST</sup> CAS BATTALION	O2-001-007-A	O2-DB-002	PO	3-70
11000	41 <sup>ST</sup> EOD	HW-105-001	HW-MB-03	01	3-48
11005	RAYTHEON MAINTENANCE FACILITY	WA-010-001	WA-KP-04	01	3-154
11018	DPWL POL TANK FARM	A-005-004-TX	A-SC-10	03	3-11
11024	BIGGS BULK POL	ST-005-001	ST-BN-04	03	3-136
11108	DPWL	HW-010-001	HW-MB-01	01	3-38
11108	DPWL AVIATION MAINTENANCE	WA-003-001	WA-KP-01	01	3-148
11108	DPWL AVIATION MAINTENANCE	WA-010-001	WA-KP-02	01	3-152
11108	C CO. 204 <sup>TH</sup> MI BN	WA-010-001	WA-KP-05	01	3-155
11156	WBAMC/MATERIALS BRANCH	HW-010-001	HW-KM-04	01	3-43
11210	AVIATION DIVISION	O2-001-007-A	O2-DB-003	03	3-66

APPENDIX C - FINDINGS BY FACILITY TABLE

FACILITY NO.	LOCATION	QUESTION NO.	FINDING ID	CLASS	PAGE NO.
11631	EL PASO FEDERAL CORRECTIONAL INSTITUTION	PM-001-007-A	PM-MLB-09	03	3-86
11631	EL PASO FEDERAL CORRECTIONAL INSTITUTION	PM-040-001-A	PM-MLB-10	03	3-90
11631	EL PASO FEDERAL CORRECTIONAL INSTITUTION	PM-045-002	PM-MLB-11	03	3-92
60-36	ENTOMOLOGY EQUIPMENT YARD 9B	PM-045-002	PM-MLB-13	03	3-94
60-36	ENTOMOLOGY EQUIPMENT YARD 9B	PM-045-005-A	PM-MLB-16	H/S	3-99
60-76	ENTOMOLOGY EQUIPMENT YARD 9B	PM-045-020-A	PM-MLB-14	03	3-98
60-76	ENTOMOLOGY EQUIPMENT YARD 9B	PM-015-001-A	PM-MLB-15	03	3-89
60-76	ENTOMOLOGY EQUIPMENT YARD 9B	PM-045-005-A	PM-MLB-17	03	3-95
INST	INSTALLATION	PO-065-006	PO-MB-01	01	3-104
INST	INSTALLATION	PM-001-003-A	PM-MLB-01	03	3-84
INST	INSTALLATION	O4-001-015-A	O4-PA-02	03	3-75
INST	DCA/RECYCLING CENTER	SO-025-001-A	SO-KB-05	03	3-124
INST	DEPARTMENT OF CONTRACTING	O4-005-001-A	O4-PA-02	03	3-76
INST	DIRECTORATE OF ENVIRONMENT	SO-001-002-A	SO-KB-08	03	3-120
INST	DPWL	WQ-001-005-A	WQ-KS-05	03	3-170
INST	DPWL	WQ-002-001-A	WQ-KS-07	03	3-172
INST	INSTALLATION WIDE	ST-090-002	ST-BN-05	01	3-132
INST	INSTALLATION WIDE	ST-025-001	ST-BN-01	02	3-133
INST	INSTALLATION WIDE	HW-010-001	HW-MB-04	01	3-40
INST	INSTALLATION WIDE	PM-005-001-A	PM-MLB-02	PO	3-101

# APPENDIX C -- FINDINGS BY FACILITY TABLE

FACILITY NO.	LOCATION	QUESTION NO.	FINDING ID	CLASS	PAGE NO.
LAGOON	MCGREGOR RANGE BASE CAMP	WA-010-001	WA-KP-08	01	3-157
LAGOON	ORA GRANDE RANGE	WA-010-001	WA-KP-10	01	3-158
LAGOON	MCGREGOR RANNGE BASE CAMP	WA-021-002-NM	WA-KP-09	03	3-160
LAGOONS	SEWAGE LAGOONS	WA-003-001-NM	WA-KP-07	01	3-150
LANDFILL	DIRECTORATE OF ENVIRONMENT	SO-075-001-TX	SO-KB-01	01	3-118
LANDFILL	DPWL	SO-035-020	SO-KB-06	01	3-117
LANDFILL	DIRECTORATE OF ENVIRONMENT	SO-140-001-TX	SO-KB-07	01	3-119
MULT	DPWL	SO-010-002-TX	SO-KB-04	01	3-116
MULT	DPWL-POL TANK FARM	ST-010-001	ST-SC-01	01	3-128
MULT	DIRECTORATE OF ENVIRONMENT	WQ-003-001	WQ-KS-02	01	3-162
MULT	ORO GRANDE AND DONA ANA RANGES	A-001-004	A-SC-02	02	3-7
MULT	DIRECTORATE OF ENVIRONMENT	O3-001-006	O3-JG-01	03	3-72
MULT	DPWL	SO-010-001-A	SO-KB-03	03	3-123
MULT	AAFES FOOD SERVICE FACILITIES	PM-001-007-A	PM-MLB-08	03	3-85
MULT	DPWL	HM-002-001	HM-JH-01	H/S	3-23
MULT	INSTALLATION SAFETY OFFICE	HM-002-001	HM-JH-02	H/S	3-25
MULT	DPWL	HM-045-001	HM-JH-03	H/S	3-33
MULT	AAFES	HM-002-001	HM-JH-06	H/S	3-30

## **APPENDIX D**

### **DRAFT INSTALLATION CORRECTIVE ACTION PLAN (ICAP)**

Fort Bliss and TRADOC must now complete the Installation Corrective Action Plan (ICAP), a tracking system and funding strategy to address findings contained in this ECAR. The purpose of the ICAP is to serve as a planning document for Fort Bliss and TRADOC to use in tracking funding and execution of the selected corrective actions. The ICAP is intended to be a matrixed format listing findings, corrective actions, schedules and required resources for correcting the deficiencies.

The ICAP framework is provided on disk and in hard copy to Fort Bliss and TRADOC for further development. Using the ECAS software, Fort Bliss can generate an installation specific database to track corrective actions to the findings produced in this ECAR.

Typically, TRADOC will request the completed ICAP within 6 weeks of receipt of this ECAR and draft ICAP. Fort Bliss may be requested periodically by TRADOC to submit a report on the status of the ICAP.